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COMMERCE COMMISSION

Decision No. 613

Determination pursuant to the Commerce Act 1986 in the matter of an application for Proposal

TRANSPACIFIC TECHNICAL SERVICES (NZ) LIMITED

and

MEDI-CHEM WASTE SERVICES LIMITED

The Commission:	Paula Rebstock David Caygill Peter J M Taylor Denese Bates QC
Summary of Application:	The acquisition by Transpacific Technical Services (NZ) Limited, or a subsidiary of Transpacific Technical Services (NZ) Limited, of the assets and businesses of Medi-Chem Waste Services Limited that relate to the collection, treatment and disposal of hydrocarbon, miscellaneous chemical and intractable wastes (the chemical smalls business).
Determination:	Pursuant to section 66(3)(a) of the Commerce Act 1986, the Commission determines to give clearance to Transpacific Technical Services (NZ) Limited for the acquisition.
Date of Determination:	15 August 2007

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EXECUTIVE SUMMARY

Introduction

E1. The Commerce Commission (Commission) received an Application from Transpacific Technical Services (NZ) Limited (TTS) seeking clearance to acquire the collection, treatment and disposal of hydrocarbon, miscellaneous chemical and intractable wastes (the chemical smalls business) of Medi-Chem Waste Services Limited (Medi-Chem).

E2. The question the Commission must consider is whether it can be satisfied that the proposed acquisition will not have, nor would be likely to have, the effect of substantially lessening competition in any market.

E3. To aid its analysis, the Commission compares two situations: one in which the acquisition proceeds (the factual), and one in which the acquisition does not proceed (the counterfactual). The impact of the acquisition on competition in a market is then viewed as the prospective difference in the extent of competition between these two situations.

Background

E4. TTS is involved in the collection, treatment and disposal of a range of different types of hazardous waste, including solvents, miscellaneous chemical waste and hydrocarbons. It has treatment facilities in Auckland and Wellington. In December 2005 TTS became part of the Transpacific Group of companies, which is the largest waste management provider in Australasia.

E5. Medi-Chem also provides waste collection, treatment and disposal services for solvents, hydrocarbons, and miscellaneous chemical waste. Its treatment facilities are located in Auckland. Medi-Chem also specialises in handling, packaging and transporting intractable wastes for disposal overseas.

The Relevant Markets

E6. The Commission first must define the relevant markets affected by the proposed acquisition in order to assess the likely competition effects. The Commission considers the relevant markets for the consideration of this Application are:

- the upper North Island market for the provision of waste hydrocarbon treatment/disposal services (*the hydrocarbons market*);
- the North Island market for the provision of miscellaneous chemical waste treatment/disposal services (*the miscellaneous chemical waste market*); and
- the national market for the provision of intractable waste disposal services by means of high temperature incineration (*the HTI intractables market*).

Factual and Counterfactual

E7. The factual scenario (with the acquisition) would remove the existing competition from Medi-Chem for the provision of hydrocarbons, miscellaneous chemical waste and HTI intractables treatment/disposal services.

E8. The Commission considers that the likely counterfactual (without the acquisition) would be that Medi-Chem's chemical smalls business would

continue to be operated in competition with TTS, either under current or new ownership.

Competition Analysis

E9. Post-acquisition, the combined entity would not face constraint from existing competition in the HTI intractables market. The Commission considers that although this market is a shrinking market, it is likely there would continue to be scope for competition to occur in the next two years. Moreover, in the factual, the combined entity would be likely to continue to face constraint from potential competition and the countervailing power of the few, large customers in this market that have the ability to facilitate entry by a new player.

E10. In the miscellaneous chemical waste market, the acquisition of Medi-Chem would eliminate TTS's biggest competitor. In the factual, it is likely that the combined entity would continue to face competition from its remaining competitor, Chemwaste, which can readily expand and exert additional constraint on the combined entity. It is also likely that these existing market players – the combined entity and Chemwaste – would face constraint from potential entry and countervailing power. In particular, large purchasers are likely to be able to exercise countervailing power through either self-supply or by facilitating new entry.

E11. In the hydrocarbons market, the acquisition of Medi-Chem would again remove TTS's largest competitor. Nevertheless, the combined entity is likely to continue to face some competition from the remaining firms, which are GMP Environmental and Chemwaste. In addition, the combined entity is likely to face constraint from potential competition and from the countervailing power of large purchasers who can facilitate entry by a new competitor.

E12. Therefore the Commission is satisfied that the proposed acquisition would not be likely to substantially lessen competition in any of the relevant markets.

Conclusion

E13. The Commission concludes that the proposed acquisition will not have, nor would be likely to have, the effect of substantially lessening competition in any market.

THE PROPOSAL

1. A notice[1] pursuant to s 66(1) of the Commerce Act 1986 (the Act) was registered with the Commerce Commission (the Commission) on 14 August 2007 seeking clearance for Transpacific Technical Services (NZ) Limited (TTS), or a wholly-owned subsidiary of TTS, to acquire the assets and businesses of Medi-Chem Waste Services Limited (Medi-Chem) that relate to the collection, treatment and disposal of hydrocarbon, miscellaneous chemical and intractable wastes (the chemical smalls business).[2]

2. Previously, on 21 February 2007, the Commerce Commission received an Application from TTS seeking clearance to acquire the assets and businesses of Medi-Chem that related to (a) the treatment, recycling, and disposal of solvents (the solvent business); and (b) the collection, treatment and disposal of other hazardous wastes - but not including the business relating to medical, quarantine and infectious waste, or the business of collecting and recycling lamps, amalgam and x-ray film and fluids (the chemical smalls business).

3. On 14 August 2007 TTS withdrew that Application and, in its place, submitted two clearance Applications that related to the same assets. The chemical smalls business is the subject of this Decision, and the solvent business is the subject of Decision 616.

4. As part of the Commission's investigation of the 21 February 2007 Application, prior to it being withdrawn, the Commission considered whether there might be a wider market for the treatment of all types of hazardous waste. Accordingly, the Market Definition section of this Decision addresses both the chemical smalls business and the solvent business, and is therefore relevant to this Decision and Decision 616.

PROCEDURE

5. Section 66(3) of the Act requires the Commission either to clear or to decline to clear the acquisition referred to in a s 66(1) notice within 10 working days, unless the Commission and the person who gave notice agree to a longer period.

6. TTS's Application for clearance for the chemical smalls business was investigated, and parties consulted, over the period following the Commission's receipt of TTS's original clearance application on 21 February 2007. In respect of the original Application, an extension of time was agreed between the Commission and the Applicant. Accordingly, prior to withdrawal, a decision on the original application had been required by 28 August 2007.

7. The Applicant sought confidentiality for specific aspects of the original application.

8. The Commission's approach to analysing the proposed Acquisition is based on principles set out in the Commission's *Mergers and Acquisitions Guidelines*.[3]

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[1] In this Decision, the notice is termed the "Application."
[2] This Application does not include the assets and businesses of Medi-Chem that relate to the solvent treatment, recycling, and disposal; medical and quarantine waste; or the collection and recycling of lamps, amalgam and x-ray film and fluids.
[3] Commerce Commission, *Mergers and Acquisitions Guidelines*, January 2004.

STATUTORY FRAMEWORK

9. Under s 66 of the Act, the Commission is required to consider whether the proposal will have, or would be likely to have, the effect of substantially lessening competition in a market. If the Commission is satisfied that the proposal will not have, nor would be likely to have, the effect of substantially lessening competition, then it is required to grant clearance to the Application. Conversely if the Commission is not satisfied it must decline. The standard of proof that the Commission must apply in making its determination is the civil standard of the balance of probabilities.[4]

10. The substantial lessening of competition test was considered in *Air New Zealand & Qantas v Commerce Commission*, where the Court held:

> "We accept that an absence of market power would suggest there had been no substantial lessening of competition in a market but do not see this as a reason to forsake an analysis of the counterfactual as well as the factual. A comparative judgement is implied by the statutory test which now focuses on a possible change along the spectrum of market power rather than on whether or not a particular position on that spectrum, i.e. dominance has been attained. We consider, therefore, that a study of likely outcomes, with and without the proposed Alliance, provides a more rigorous framework for the comparative analysis required and is likely to lead to a more informed assessment of competitive conditions than would be permitted if the inquiry were limited to the existence or otherwise of market power in the factual."[5]

11. In determining whether there is a change along the spectrum that is significant the Commission must identify a real lessening of competition that is more than nominal and not minimal.[6] Competition must be lessened in a considerable and sustainable way. For the purposes of its analysis the Commission is of the view that a lessening of competition and a creation, enhancement or facilitation of the exercise of market power may be taken as being equivalent.

12. When the impact of market power is expected to be predominantly upon price, for the lessening, or likely lessening, of competition to be regarded as substantial, the anticipated price increase relative to what would otherwise have occurred in the market has to be both material, and ordinarily able to be sustained for a period of at least two years or such other time frame as may be appropriate in any give case.

13. Similarly, when the impact of market power is felt in terms of the non-price dimensions of competition such as reduced services, quality or innovation, for there to be a substantial lessening, or likely substantial lessening of competition, these also have to be both material and ordinarily sustainable for at least two years or such other time frame as may be appropriate.

ANALYTICAL FRAMEWORK

14. The Commission applies a consistent analytical framework to all its clearance decisions. The first step the Commission takes is to determine the relevant market or markets. As acquisitions considered under s 66 are prospective, the Commission uses a forward-looking type of analysis to assess whether a lessening of competition is likely in the defined market(s). Hence, an

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[4] *Foodstuffs (Wellington) Cooperative Society Limited v Commerce Commission* (1992) 4 TCLR 713-722.
[5] *Air New Zealand & Qantas Airways Ltd v Commerce Commission* (2004) 11, TCLR 347, Hansen J and K M Vautier, Para 42.
[6] *Fisher & Paykel Limited v Commerce Commission* (1996) 2 NZLR 731, 758 and also *Port Nelson Limited v Commerce Commission* (1996) 3 NZLR 554.

important subsequent step is to establish the appropriate hypothetical future with and without scenarios, defined as the situations expected:

- with the acquisition in question (the factual); and
- in the absence of the acquisition (the counterfactual).

15. The impact of the acquisition on competition is then viewed as the prospective difference in the extent of competition in the market between those two scenarios. The Commission analyses the extent of competition in each relevant market for both the factual and the counterfactual, in terms of:

- existing competition;
- potential competition; and
- other competition factors, such as the countervailing market power of buyers or supplies.

THE PARTIES

Transpacific Technical Services (NZ) Limited (TTS)

16. TTS, formerly United Environmental Limited, was acquired from Nuplex Industries Limited by ERS New Zealand Limited in December 2005.

17. TTS and its parent ERS are ultimately wholly-owned subsidiaries of the Transpacific Group of companies. The Transpacific Industries Group is the largest waste management provider in Australasia, and is involved in the management of solid, liquid, and hazardous waste.

18. TTS itself is involved in the treatment of a range of different types of hazardous waste, including: bulk wastes, such as heavy metals and organics; solvents; miscellaneous chemical waste; and hydrocarbons. It has treatment facilities in Auckland and Wellington [ ].

19. Through its subsidiary Transpacific Industrial Solutions (NZ) Limited, the Transpacific Group also operates hazardous waste collection, treatment and disposal services - mostly for bulk heavy metal waste and bulk organic waste in Rotorua, Whakatane and New Plymouth.

20. TTS's sister company Medismart Limited (Medismart), formerly Nuplex Medismart Limited, is located in Auckland and primarily deals with medical and quarantine waste. This business does not form part of this Application. Medismart's Wellington, Christchurch and Dunedin assets were sold to International Waste Limited in October 2006.

Medi-Chem Waste Services Limited (Medi-Chem)

21. Medi-Chem was acquired by private investors, Tennex Waste Services Limited (Tennex Waste), in late 2003. In turn, Medi-Chem acquired the local business of Tredi New Zealand Limited in August 2005.

22. Medi-Chem provides waste collection, treatment and disposal services in relation to solvents and other volatile organic compounds,[7] hydrocarbons, and miscellaneous chemical waste. Medi-Chem also specialises in the handling,

[7] Decision 616 relates to the proposed acquisition of Medi-Chem's waste solvent business by TTS.

packaging and transportation of certain types of hazardous waste for off-shore disposal.

23. Medi-Chem's sister company International Waste Limited (IWL) provides waste services for medical, quarantine and infectious waste. IWL acquired the Wellington, Christchurch and Dunedin assets of Medismart from TTS in October 2006.

24. Medi-Chem also provides collection and disposal services for hazardous wastes with recoverable heavy metals, e.g., lamps, amalgam, x-ray film and fluids. These activities are not included in the proposed transaction, and will be undertaken by IWL post-acquisition.

OTHER PARTIES

25. A complete list of relevant parties for this Decision and Decision 616 is provided in Appendix 1.

Chemwaste Industries Limited (Chemwaste)

26. Chemwaste operates hazardous waste treatment facilities in Auckland, Wellington and Christchurch. It provides services for bulk hazardous wastes (e.g., heavy metal and organic waste), hydrocarbons, miscellaneous chemical waste and special wastes. Chemwaste sub-contracts the overseas disposal of certain types of hazardous waste waste to Medi-Chem.

Tredi New Zealand Limited (Tredi)

27. Tredi is a 100 % owned subsidiary of Tredi SA, a French hazardous waste company based in Paris, France. Tredi SA is part of the Groupe Seche Environnment.

28. In New Zealand, Tredi's main business activity is the promotion of the services provided by Tredi SA - the destruction of hazardous wastes which cannot be treated or disposed of in New Zealand.

29. Tredi sold its local business assets (which relate to the collection, packaging and export of certain hazardous wastes) to Medi-Chem in August 2005. As part of this sale, Medi-Chem and Tredi entered into an agreement whereby Medi-Chem manages the local activities of the business (the collection, packaging and export) and Tredi manages the destruction of these hazardous wastes through Tredi SA's high-temperature incineration facilities in Europe.

INDUSTRY BACKGROUND

Definition of Hazardous Waste

30. In its original Clearance Application, TTS acknowledged that in Decision 355, the Commission had noted there was no nationally accepted definition of hazardous waste.[8] The Applicant duly submitted that the Commission can take guidance from the Hazardous Substances and New Organisms Act 1996 (HSNO).[9]

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[8] Decision 355, *Waste Management NZ Limited / Waste Care Limited*, 14 May 1999, para 22.

[9] Specifically, the *Hazardous Substances (Classifications) Regulations 2001*, which prescribe eight classes of hazardous waste, and the *Hazardous Substances (Disposal) Regulations 2001*, which prescribe the manner in which the eight classes (of hazardous substances) can be disposed.

31. Under HSNO, a hazardous substance is a defined mixture of elements or compounds either naturally occurring or produced synthetically. Such substances can readily explode, burn, oxidise, or corrode, and/or be toxic to people and ecosystems. However, the current definition of hazardous substances excludes manufactured articles that have hazardous properties, i.e., some hazardous wastes.[10]

32. Industry participants canvassed by the Commission advised that for this reason, although HSNO provides guidance for the management of hazardous substances, it does not, strictly speaking, provide for the management of hazardous waste. This is particularly the case for hazardous wastes that consist of spent hazardous substances or mixtures of various hazardous substances.[11]

33. Industry participants advised that the best definition for hazardous waste currently available is the draft working definition published by Ministry for the Environment (MFE) in its June 2002 report *Hazardous Waste Guidelines, Module 1: Hazardous Waste Guidelines – Identification and Record-Keeping,*[12] which provides that hazardous waste is any waste which:

- contains hazardous substances at sufficient concentrations to exceed the minimum degrees of hazard specified by *Hazardous Substances (Minimum Degrees of Hazard) Regulations 2000* under HSNO; or
- meets the definition for infectious substances as defined by the *Land Transport Rule: Dangerous Goods 1999* and *NZ Standard 5433: 1999 - Transport of Dangerous Goods on Land*; or
- meets the definition for radioactive material as defined by the *Radiation Protection Act 1965 and Regulations 1982*.

34. The Commission has therefore adopted the above working definition of hazardous waste for the purpose of assessing this Application.

Management of Hazardous Waste in New Zealand

35. According to MFE, New Zealand generates lower volumes of hazardous waste compared to other developed countries, but New Zealand's predominantly rural-based economy means that New Zealand has a particular problem in respect of legacy stocks of obsolete agricultural and forestry chemicals.[13]

Regulatory Framework

36. The regulatory framework pertaining to the management of hazardous waste has changed significantly since the Commission last considered the hazardous waste industry in 2001.[14]

37. In 2002 the New Zealand Waste Strategy, a joint effort between the Central Government and Local Government New Zealand, was released. The New Zealand Waste Strategy included recommendations made by the OECD in its

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[10] http://www.mfe.govt.nz/issues/hazardous/

[11] The Commission notes that the Applicant subsequently made comments to this effect, advising the Commission, in its letter dated 31 July 2007, that "… waste does not currently fall under the ambit of HSNO – but HSNO does apply to some of the substances that TTS processes – such as solvents … the HSNO requirements in relation to "toxic" substances are unclear".

[12] http://www.mfe.govt.nz/publications/waste/haz-waste-guide-mod1-jun02/html/index.html

[13] MFE, *Policy Framework to Reduce and Safely Manage Hazardous Wastes in New Zealand*, June 2006 Update, page 1-2.

[14] Decision 442, *United Environmental Limited / Solvent Services Limited*, 5 October 2001.

1996 report *Environmental Performance Review of New Zealand.* The New Zealand Waste Strategy set targets for a number of priority waste areas, including hazardous waste.[15] The New Zealand Waste Strategy acted as a catalyst for some of the more significant changes to legislation at the central government level.

38. At present the policy, legislative and regulatory framework for the industry includes:

- HSNO;
- Part XXXI of the Local Government Act 1974;
- the Local Government Act 2002;
- the New Zealand Waste Strategy 2002; and
- the Resource Management Act 1991 (RMA).

The Hazardous Waste Life Cycle

39. For both practical and legislative reasons, hazardous waste passes through a number of different stages from the point of generation until its final disposal.[16]

Generation of Hazardous Waste

40. The generation of hazardous waste occurs during many everyday processes, most commonly during the manufacture and use of chemicals by industrial and manufacturing firms, as well as domestic and educational and medical settings.

41. In general, hazardous waste generators can be thought of as falling into one of three distinct categories - small, medium or large waste generators – depending on the volume of hazardous waste produced.[17]

42. Many medium and large hazardous waste generators engage a hazardous waste treatment operator to collect, treat, and dispose of their hazardous waste. Most small hazardous waste generators negotiate with a hazardous waste collector to identify, label and package their hazardous waste and transport it to an appropriate treatment facility. Hazardous waste generated by households is usually managed on behalf of residents by local government bodies, which may provide collection services such as the Hazmobile for their rate-payers.

43. All hazardous waste generators canvassed by the Commission recognized that they cannot directly dispose of untreated hazardous waste, whether to a disposal facility or by discharging it into the environment. Both TTS and Medi-Chem advanced several suggestions as to how hazardous waste generators might dispose of certain types of hazardous waste themselves. The Commission put these suggestions to industry participants; all were in agreement that because the disposal of hazardous waste is so highly regulated, undertaking such activities without the necessary facilities or consents would expose hazardous waste generators to prosecution.

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[15] MFE, *New Zealand Waste Strategy*, 2002, page 25.
[16] http://www.mfe.govt.nz/issues/waste/targets/index.html
[17] In the report Environment and Business Group Limited and Auckland Regional Council, *The Auckland Region Hazardous Waste Survey*, 1996, classifies large hazardous waste generators as producing more than 10 tonnes, medium-sized as producing 100kg-10 tonnes, and small generators less than 100kg of hazardous waste per annum.

Collection of Hazardous Waste

44. Collectors are engaged by hazardous waste generators to remove and transport hazardous waste safely to an appropriate treatment facility. Some collectors, usually specialized hazardous waste collectors, such as JBL Environmental and R & S MacGregor, and vertically-integrated treatment firms, such as Medi-Chem and Chemwaste, also provide services to assist in the identification, packaging and labelling of hazardous waste.

45. The collector also usually selects the treatment facility, but some customers (usually larger hazardous waste generators) do sometimes nominate the treatment facility to be used.

46. Collectors have a number of duties and obligations when carrying out their day-to-day activities. As they are handling hazardous wastes, which may include hazardous substances, they must be compliant with HSNO.[18] The transportation of hazardous waste is subject to *Land Transport Rule (Dangerous Goods) 2005* and the *Liquid and Hazardous Waste Codes of Practice 2003*. Collectors also have obligations under the RMA to ensure that hazardous waste is collected and transported in a manner that will not cause adverse effects to the environment.

Storage of Hazardous Waste

47. Hazardous waste is stored at many stages during its life cycle. There are a range of regulations that apply to the storage of hazardous waste, including HSNO, the Building Regulations 1992, and the RMA.

Treatment of Hazardous Waste

48. The treatment of hazardous waste is for the most part regulated by the RMA, and implemented at a local level through district and regional plans. Under these plans, new hazardous waste treatment facilities (or existing hazardous waste treatment facilities where new activities on site are planned) may require resource consents.

49. Resource consents usually relate to specific pieces of infrastructure and treatment processes. For example, both Medi-Chem's and TTS's Air Quality Discharge Consents nominate specific pieces of equipment and the treatment processes permitted to operate under that consent at a specified property. A change in, or expansion of, activity that increase discharges to air at that property (e.g., introduction of new equipment) would require a review of the current consent, and possibly a new consent.

50. Resource consents for discharges (to air, water or land) and certain types of land-use consents are usually granted by the regional council, whilst territorial authorities (city and district councils) issue land-use consents. Local authorities also have the ability to enforce the RMA should an existing facility undertake practices deemed to have adverse environmental effects.

51. The RMA has been used to implement controls on several existing hazardous waste treatment operators over the last five years. Regional councils spoken to by the Commission advised they continue to work with hazardous waste

[18] For example, hazardous waste collectors should hold approved handlers certification, as set out by the *Hazardous Substances and New Organisms (Personnel Qualifications) Regulations 2001* and must ensure compliance with the *Hazardous Substances (Tracking) Regulations 2001*.

treatment operators to ensure that processes and treatment facilities are compliant with the RMA.

52. Industry participants commented that as a consequence of the recent regulatory changes, there has been a movement away from more generalised treatment infrastructure (i.e., open-air mixing pits) to more specialised plant and equipment designed to house and facilitate very specific physical and chemical processes.

53. In consultation with industry participants, the Commission has established several broad categories of hazardous waste, based on the typical treatment infrastructure and processes. These processes are summarised in Table 3. Processes which are subject to this Decision, and Decision 616, are highlighted in bold.

Table 3: Common Hazardous Waste Treatment Processes in New Zealand

Waste Type	Process	Infrastructure	Example
Bulk Organic	Flocculation; pathogenicide; agitation; quiescence; decanting/dewatering.	Bulk reactor, bulk storage tanks, filter press.	Septic tank waste.
Interceptor Waste	Flocculation; pathogenicide; filtration; decanting/dewatering.	Simon Moos machine, bulk storage tanks, filter press.	Restaurant grease-trap waste.
Bulk Inorganic	Large-scale chemical reaction; decanting/dewatering.	Bulk reactor, bulk storage tanks, filter press.	Spent electroplating bath.
Solvents	**Distillation.**	**Still.**	**Used solvent-based cleaning solution.**
Miscellaneous chemical waste	**Small-scale chemical reaction; decanting & dewatering.**	**Laboratory and auxiliary equipment.**	**Waste laboratory chemicals.**
Hydrocarbons	**Mix with any one of: concrete, clay, soil, sawdust, sand; bioremediation.**	**Mixer, contained vessel/pit.**	**Waste inks, resins and glues.**
Medical and Quarantine	Steam sterilization.	Autoclave.	Used surgical dressings.
Pharmaceuticals	Granulation; heat/steam treatment.	Shredder, autoclave.	Expired prescription medicines.
Special	Chemical reaction; aggregation with bulk inorganic process.	Small reactor.	Cyanide-containing waste.
Waste oil	Heat; demulsification; agitation; quiescence; decanting/dewatering; and/or distillation.	Refinery and/or still.	Spent transmission oil.
Intractables	**Exported for treatment/recycling and/or disposal at an overseas facility.**	**Storage facility, treatment/disposal contract with overseas operator, export permit.**	**Hazardous waste for which there is no treatment method in New Zealand.**

Source: Industry Participants

Disposal of Treated Hazardous Waste

54. The method for the final disposal of hazardous waste depends on its physical state following the treatment process: solidified treated hazardous waste is disposed to landfill; and liquefied treated hazardous waste is disposed to trade waste**.**

55. Disposal operators enforce acceptance criteria to ensure their own resource consent conditions are not breached. To this end, treated hazardous waste is stringently tested to ensure it meets the necessary criteria prior to disposal.

Managing Intractable Hazardous Waste

56. For some hazardous wastes, there is currently no practicable, accessible or acceptable treatment and/or disposal method available in New Zealand. These wastes are known as intractables, and are exported for treatment and disposal overseas. Table 4 sets out some of the different hazardous wastes exported from New Zealand. The type of hazardous waste subject to this Decision is highlighted in bold.

Table 4: Examples of Intractable Hazardous Waste Exported from New Zealand

Waste Type	Process	Infrastructure	Example
HTI Intractables	**Exported for disposal at overseas high temperature incinerator.**	**Dangerous goods store, Disposal contract with overseas high temperature incinerator operator, Export Permit.**	**Obsolete pesticides.**
Various Intractable Heavy Metals	Exported for recycling at an appropriate overseas metal recycling plant.[19]	Dangerous goods store, Disposal contract with overseas metal recycler, export permit, dangerous goods store, Export Permit.	Lead-acid batteries (lead); fluorescent tubes (mercury); x-ray fluid (silver).
Non-recoverable waste solvent (non-halogenated).	Exported to be blended and burnt as a solvent-based fuel.	Dangerous goods store, Disposal contract with an overseas operator that uses solvent-based fuel e.g., cement/lime kiln operator, Export Permit.	Mon-halogenated solvent (with low-levels of other contaminants), which cannot be recovered by distillation.

Source: Industry Participants.

57. In its original Clearance Application, TTS submitted that no aggregation would occur in respect of intractables, as TTS contracts with Medi-Chem to provide this service.

58. TTS subsequently reconsidered its submission, and informed the Commission that it had never used Medi-Chem to dispose of intractables. The Commission now understands that TTS does accept intractables from hazardous waste generators, as under previous ownership TTS secured [ ] contract with Ekokem Ab Oy (Ekokem), a high-temperature incinerator (HTI) disposal operator located in Finland.

59. As both TTS and Medi-Chem are involved in the provision of hazardous waste services for intractables, the Commission has considered intractables to be relevant to its consideration of this Application.

60. The Ministry of Economic Development (MED) advised the Commission that approximately 90 % of hazardous waste exported from New Zealand comprises lead-acid batteries destined for recycling. The remaining 10 % consists of other heavy metallic wastes destined for recycling (e.g., mercury-containing wastes, such as dental amalgam and fluorescent tubes), and hazardous wastes destined for destruction in a HTI.

61. The only type of intractable waste handled by both TTS and Medi-Chem is HTI intractables. Many HTI intractables are industrial and agricultural chemicals that have since been banned due to the adverse effect on human

[19] The choice of recycling plant would usually depend on the type of metal which is being recycled.

health and the environment. Examples include persistent organic pollutants (POPs)[20] and specified ozone-depleting chemicals.[21]

62. High-temperature incineration is one of the most common methods used to destroy these types of waste chemicals. As the incineration of hazardous waste is now prohibited in New Zealand, hazardous waste operators sub-contract the disposal of these hazardous wastes to overseas operators.

63. New Zealand has ratified two conventions that govern the transboundary movement of hazardous waste: the *1989 Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal* (the Basel Convention) and the Waigani Convention.

64. The Basel Convention requires prior approval of hazardous waste imports and exports (in New Zealand, MED is the approving agency), and requires exporting countries to ensure that hazardous waste will be managed "in an environmentally sound manner". The Waigani Convention largely mirrors the obligations in the Basel Convention, but applies to transboundary movement of hazardous waste within the Pacific region.[22]

MFE Agrichemicals Programme

65. The bulk of POPs remaining in New Zealand are legacy stocks of obsolete agricultural chemicals (agrichemicals) in rural areas. The process of ridding New Zealand of these legacy stocks started in 1991 with a trial collection in Taranaki, followed in 1992 by a trial in the Waikato region. From 1993 to 1996 MFE provided a subsidy for collection (and in some cases, for disposal) to a number of councils from its Sustainable Management Fund. Later, between 1997 and 1999, a consortium of seven councils worked together to dispose of obsolete agrichemicals with funding support from the MFE. The councils involved collectively shipped 120 tonnes of obsolete agrichemicals overseas through Tredi.[23]

66. In 2002, MFE estimated the volume of obsolete agrichemicals remaining in New Zealand to be 282 tonnes. MFE duly formed a partnership with regional councils to provide a three-year, comprehensive rural agrichemical collection programme (the MFE Agrichemicals Programme). The primary objective of the Agrichemicals Programme is to ensure that New Zealand upholds its obligations under the Stockholm Convention.[24] To this extent, the MFE Agrichemicals Programme has mainly targeted POPs, most of which are obsolete agrichemicals.[25]

67. MFE called for tenders to provide these hazardous waste collection and disposal services. Tredi was the successful bidder for intractable agrichemicals and Chemwaste for agrichemicals that could be treated locally. The MFE

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[20] POPs (as defined under the Stockholm Convention and the *HSNO (Stockholm Convention) Amendment Act 2003*).
[21] Ozone depleting chemicals (as defined by the Montreal Protocol and the *Ozone Layer Protection Act 1996*).
[22] http://seanet.org.nz/index2.php?option=com_content&do_pdf=1&id=132
[23] Memorandum from Viv Smith, Convenor, Regional Waste Officers Forum to Resource Managers Group, *Intractable Agrichemicals - problems with MfE funding and system arrangements*, 23 February 2007, page 1.
[24] The Stockholm Convention bans the production and use of twelve specified chemicals, known as POPs, which are known to be toxic to human health and the environment.
[25] http://www.mfe.govt.nz/issues/waste/special/agrichemicals/index.html

Agrichemicals Programme commenced in 2003, and in its first three years, 226 tonnes of obsolete agrichemicals were collected. [26]

68. In 2006, MFE re-estimated the volume of obsolete agrichemicals remaining as being approximately 174 tonnes. Nigel Ironside, Manager, Sustainable Industry, MFE, advised the Commission that it had become apparent that its first estimate had been too low.

69. Consequently, MFE extended its Agrichemicals Programme for another three years. This time, the Medi-Chem/Tredi partnership was the successful tenderer for the management of intractable agrichemicals and Chemwaste for agrichemicals that could be treated locally.

70. At the time of this Decision, MFE predicted that following the completion of the MFE Agrichemicals Programme in June 2009 there would be a residual volume of 60 tonnes of obsolete agrichemicals remaining. A number of regional councils advised the Commission they consider it likely that MFE's estimate under-represents actual volumes remaining.[27]

71. However, at the time of this Decision, MFE did not intend to continue the Agrichemicals Programme after the current contract expires in 2009. It considers that it would have achieved its objective under the Stockholm Convention - to remove the majority of legacy stocks of POPs.

72. Industry participants advised the Commission that after June 2009, the responsibility for eradicating historical stocks of obsolete agrichemicals would likely fall to regional councils.

PREVIOUS DECISIONS

New Zealand

73. The Commission has previously examined hazardous waste markets on three occasions:

- Decision 381, *Medical Waste Group Limited / San-I-Pak (NZ) Limited,* 19 January 2000;
- Decision 386, *Medical Waste Group Limited / San-I-Pak (NZ) Limited,* 15 March 2000; and
- Decision 442, *United Environmental Limited / Solvent Services Limited*, 5 October 2001.

74. None of these previous Decisions concerned the types of hazardous waste subject to this acquisition (hydrocarbons, miscellaneous chemical waste, and HTI intractable waste). In Decisions 381 and 386, the Commission considered the market for medical and quarantine waste, and in Decision 442, the Commission considered the markets for waste solvent.

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[26] http://www.mfe.govt.nz/issues/waste/special/agrichemicals/index.html

[27] Memorandum from Viv Smith, Convenor, Regional Waste Officers Forum to Resource Managers Group, *Intractable Agrichemicals - problems with MfE funding and system arrangements*, 23 February 2007, pp 2-3, provides a number of examples where the estimated volume remaining has underestimated actual volumes remaining.

Other Jurisdictions

European Commission (EC)

75. In M.4318, *Veolia ES Holdings plc and Cleanaway Holdings Limited,* 21 September 2006, the EC considered the relevant market was likely to be that for *the incineration of hazardous waste in {high temperature incinerators} in the UK.*

76. The EC identified that post-acquisition the combined entity would have a 100 % market share in the relevant market, since the only two high temperature incinerators in the UK belonged to Veolia and Cleanaway.

77. In response to the EC's concerns, the parties submitted a divestment undertaking of Veolia's high temperature incineration plant. The EC did not oppose the proposed acquisition as it concluded that the divestment undertaking would sufficiently address any competition concerns that may have arisen.

MARKET DEFINITION

78. The Act defines a market as:[28]

> … a market in New Zealand for goods or services as well as other goods or services that, as a matter of fact and commercial common sense, are substitutable for them.

79. In *Telecom Corporation of New Zealand Limited v Commerce Commission* the High Court established the following principles in the approach to defining markets:

> "First, and most generally, we seek to identify the area or areas of close competition of relevance for the application(s). In other words, we seek to identify the constraints upon the price and production policies of firms or divisions of firms whose conduct is of relevance for the matters litigated.
>
> Secondly, competition may proceed both through substitution in demand and substitution in supply in response to changing prices or, more comprehensively, the changing price-product-service packages offered… The mental test that prompts a summary evaluation of the evidence is to ask how buyers and sellers would likely react to a notional small percentage increase in price of the products of interest.
>
> Thirdly, the market is a multi-dimensional concept – with dimensions of product, space, functional level and time".[29]

80. For the purpose of competition analysis, the internationally accepted approach is to assume the relevant market is the smallest space within which a hypothetical profit maximising sole supplier of a good or service, not constrained by the threat of entry, would be able to impose at least a small yet significant and non-transitory increase in price (SSNIP), assuming all other terms of sale remain constant (the SSNIP test). The smallest space in which such market power may be exercised is defined in terms of the dimensions of the market specified below. The Commission generally considers a SSNIP to involve a five to ten percent increase in price that is sustained for a period of one year.

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[28] Commerce Act 1986, s 3(1).
[29] *Telecom Corporation of New Zealand Limited v Commerce Commission* (1991) 4 TCLR 473, 501-502.

81. The Commission defines relevant markets in terms of up to five characteristics or dimensions, as follows:

- the goods or services supplied and purchased (the product dimension);
- the level in the production or distribution chain (the functional level);
- the geographic area from which the goods or services are obtained, or within which the goods or services are supplied (the geographic extent);
- the temporal dimension of the market, if relevant (the timeframe); and
- the customer dimension of the market.

82. Market boundaries should be drawn by reference to the conduct at issue. The process of defining markets is inevitably an imprecise one, since transactions in the economy do not fall neatly into a series of discrete and easily observable markets. In any case, it may not often be necessary - or practical - to identify the precise boundaries of the activities included in the market. As has already been noted, market definition is a tool for competition analysis rather than an end in itself, and a decision to define a market in a particular way does not mean that a potential substitute or constraint from outside that market is ignored.[30]

83. The Commission seeks to define markets in a way that best assists the analysis of the competitive impact of the acquisition under consideration. The starting point is the common activities of the two parties, because this is where aggregation may occur. In the present case, the common activities occur in the provision of services relating to the collection, treatment and disposal of certain types of hazardous waste.

84. In its original Clearance Application, TTS submitted the relevant markets, in respect of the proposed acquisitions for both Medi-Chem's chemical smalls business and solvents business, were:

- the market for the treatment (including, where appropriate, treatment for re-use) and, where required, disposal, of hazardous wastes (both liquid and solid) in the following market segments:
    i. solvents (the geographic scope of which is national);
    ii. hydrocarbons (the geographic scope of which is the Auckland region);
    iii. laboratory chemicals, not including intractables (the geographic scope of which is national); and
- the market for the collection of packaged hazardous waste (the geographic scope of which is the Auckland region).

85. For the reasons explained below, the Commission considers that the markets relevant to this Application are:

- the New Zealand market for the provision of intractable waste disposal services by means of high temperature incineration (*the HTI intractables market*);

[30] *Brambles New Zealand v Commerce Commission* (2003) 10 TCLR 868.

- the North Island market for the provision of miscellaneous chemical waste treatment/disposal services (*the miscellaneous chemical waste market*); and
- the upper North Island market for the provision of waste hydrocarbon treatment/disposal services (*the hydrocarbons market*).

Functional Markets

86. The production, distribution, and sale of a product typically occur through a series of functional levels, conventionally arranged vertically in descending order. Generally, the Commission identifies separate relevant markets at each functional level affected by an acquisition, and assesses the impact of the acquisition on each. In this Application, overlap occurs in respect of the collection, treatment and disposal of hazardous waste.[31]

87. The Applicant submitted that although the collection of hazardous waste, and its treatment and disposal, are physically separate functions, customers generally engage a treatment provider to provide all of these services. If accepted, this would imply that providers are vertically integrated, and therefore that it would not be appropriate to distinguish separate functional markets.

88. The Commission has considered whether it would be appropriate in this case to delineate separate functional levels. The Commission examined whether supply-side substitution could occur between functional levels, such that if suppliers at one level were easily able to switch to supplying at another level in response to a small change in relative prices, and vice versa, then the presence of these 'near competitors' would suggest that the two functional levels would effectively be part of a single market.

Collection and Treatment

89. Industry participants advised the Commission that a hazardous waste operator providing one of either a collection or treatment service cannot easily switch to providing another service.

90. Waste generators interviewed by the Commission said that they could not engage a collection operator to treat their hazardous waste in the event that the price of treatment increased, apart from situations where a treatment operator was already vertically-integrated with a collection service. A collector would not have the specialised expertise, facilities, supporting infrastructure and consents or certification.

91. Likewise, a waste generator could not engage a specialist hazardous waste treatment operator to provide a collection service. Some treatment operators may, through their employment of chemists and technicians, have the experience and skills to identify, label and package hazardous waste and identify a suitable treatment facility, but they would not necessarily have the equipment or certification required to remove and transport hazardous waste.

92. The limited substitutability on the supply-side therefore suggests that collection and treatment services should be viewed as separate functional levels of the market.

[31] As hazardous waste is usually stored at any of the stages in its lifecycle, the Commission has not deemed it necessary to identify storage as a separate functional level for this particular fact scenario.

93. In respect of the current Application, although TTS and Medi-Chem provide some collection services, their core business is the treatment and disposal of hazardous waste. Accordingly, for the purposes of assessing this particular fact scenario, the Commission considers it is not necessary to separately analyse the competitive impact of the proposed acquisition on the provision of hazardous waste collection services.

Treatment and Disposal

94. Industry participants advised that hazardous waste generators normally engage a hazardous waste treatment operator to provide both treatment and disposal services for their hazardous waste.

95. Hazardous waste treatment operators interviewed by the Commission advised that they typically provide the disposal service as part of their waste processing service. To this end, the Commission considers that in assessing the current Application, it is not necessary to delineate and separately analyse the provision of treatment services and the provision of disposal services.

Conclusion on Functional Markets

96. The Commission considers that the relevant functional level is the *provision of hazardous waste treatment/disposal services*.

Product Markets

97. The greater the extent to which one good or service is substitutable for another, on either the demand-side or supply-side, the greater the likelihood that they are bought and supplied in the same market.

98. Close substitute products on the demand-side are those between which at least a significant proportion of buyers would switch when given an incentive to do so by a small change in their relative prices.

99. Close substitute products on the supply-side are those between which suppliers can easily shift production, using largely unchanged production facilities and little or no additional investment in sunk costs, when they are given a profit incentive to do so by a small change in their relative prices.

A Wider Hazardous Waste Market?

100. Previously, on 21 February 2007, the Commerce Commission received an Application from TTS seeking clearance to acquire the assets and businesses of Medi-Chem that related to (a) the treatment, recycling, and disposal of solvents (the solvent business); and (b) the collection, treatment and disposal of other hazardous wastes (the chemical smalls business).

101. On 14 August 2007 TTS withdrew that Application, and in its place, submitted two clearance Applications that related to the same assets. Medi-Chem's chemical smalls business is subject to this Decision, and Medi-Chem's solvent business is subject to Decision 616.

102. TTS, in its original Application, submitted that the extent of demand- and supply-side substitutability is such that there is a single market for the treatment and disposal of all hazardous wastes.

103. As part of the Commission's investigation of the 21 February 2007 Application, prior to it being withdrawn, the Commission considered whether there might be

a wider market for the treatment of all types of hazardous waste.[32] Accordingly, the Market Definition section of this Decision addresses both the chemical smalls business and the solvent business, and is therefore relevant to this Decision and Decision 616.

104. It is widely recognised that market boundaries are often blurred. That appears to be the case here for the product markets involving the treatment/disposal of hazardous waste. The potential danger in such situations is that either overly broad or overly narrow product market definitions may be adopted, leading to a distorted picture of the relevant competition issues arising from an acquisition. A broad market may look competitive post-acquisition, yet narrower markets may omit significant competition factors. Clearly, it is important to consider all of the relevant demand- and supply-side substitutabilities. The Commission has relied upon the information provided by a wide range of industry participants in coming to its view on the appropriate product markets.

Demand-side Substitutability

105. For the Commission to adopt the broader market proposed by the Applicant, it would have to be satisfied that (in terms of the SSNIP test) it would not be profitable for a hypothetical sole provider of one type of hazardous waste treatment/disposal service to increase prices by a small yet significant and non-transitory amount because this would result in sufficient numbers of generators switching to another hazardous waste operator.

106. Table 3 in the 'Industry Background' section of this Decision details a number of different treatment/disposal services provided by hazardous waste treatment firms in New Zealand.

107. Hazardous waste generators interviewed by the Commission were largely aware of their obligations to ensure that their hazardous waste is treated and disposed of in the correct manner. These generators advised the Commission that, for this reason, they do not consider the range of treatment/disposal services to be substitutable, even in the face of a SSNIP.

108. The Commission notes that many hazardous waste generators, such as [ ], prefer to engage a hazardous waste operator capable of providing a comprehensive solution for all of their different types of hazardous waste (i.e., a 'one stop shop').

109. A SSNIP for one of a number of treatments purchased might amount only to a relatively small price increase across the bundle as a whole. Hazardous waste generators that prefer a comprehensive solution might, therefore, be less likely to switch service providers in the face of a SSNIP. If this is the case, then it could imply that there might be a broader market, despite the lack of substitutability between the range of treatment/disposal services.

110. However, most generators canvassed by the Commission advised that they receive itemised invoices from their treatment/disposal provider, and closely monitor price and service quality. In the event of a price increase, or service

[32] In Decision 442, the Commission noted that there might be a wider market for the treatment of hazardous waste, but did not analyse this possibility in any detail as the area of aggregation was limited to the provision of waste solvent services.

decrease, they would react by sending some (or all) of their hazardous waste to another (appropriate) service provider.[33]

111. To this extent, the Commission is of the view that there is little demand-side substitutability between the range of hazardous waste treatment/disposal services.

Supply-side Substitutability

112. In considering whether supply-side substitutability exists, the Commission must consider whether a hypothetical monopolist supplier of one service would be constrained from introducing a SSNIP by the ability of suppliers of other treatment services to expand to supply that service, within one year, without substantially investing in additional plant and equipment (where the capital outlay is largely sunk).

113. Industry participants were uniform in their view that it would not be possible for a hypothetical monopoly supplier of one or other of waste solvent, HTI intractables, miscellaneous chemical waste, and hydrocarbons services to switch to providing other hazardous waste treatment/disposal services.

114. As previously noted in the 'Industry Background' section of this Decision, the infrastructure and processes used to facilitate the treatment of hazardous waste is, more often than not, specific to the type of hazardous waste, and cannot be employed to treat other types of hazardous waste.[34] In addition, consents and certifications generally relate to specific processes and related equipment.

115. For example, waste oil treatment operators interviewed by the Commission commented that even the two most similar treatment processes, distillation of waste solvent and distillation of waste oil, are not substitutable. Waste solvent and waste oil have different physical and chemical properties and the treatment infrastructure is thus especially designed and calibrated with these properties in mind.

116. Scale is also an important consideration. Industry participants reported that most solvent treatment operators provide small-scale hydrocarbon treatment services as an adjunct of the waste solvent treatment service, as the still-bottom residue is usually a hydrocarbon-based waste. However, this small-scale treatment process could not be used in place of the type of bulk hydrocarbon treatment service offered by TTS and Medi-Chem. Bulk treatment would involve the acquisition of specialist infrastructure and resource consents.[35]

117. Moreover, TTS advised that it can be difficult for existing operators to add new plant and equipment on an existing site because of spatial constraints. Bunding is designed to contain existing equipment, and certain incompatible processes must be physically separated. To this extent, short of acquiring supplementary

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[33] For example, [ ] advised the Commission that because of a decrease in quality of its existing treatment provider, [ ] recently engaged [ ] to collect and transport its hazardous waste to [ ] for treatment.

[34] For example, in an interview on 15 June 2006, Medi-Chem advised the Commission "Each hazardous waste … has a particular treatment process. And even those liquid treatment processes, some of them are not designed to deal with acidic wastes, some of them are to deal with heavy metal waste … there are technologies to deal with pretty much any hazardous waste there is in the world, but there's no 'one fits all'."

[35] TTS advised that it could add solidified treated organic waste to its hydrocarbon treatment facility; although this would not be considered as supply-side substitutability as the organic waste must first be treated through its own individual process.

land, additional costs may be incurred as a result of the need to redesign the site to incorporate a new piece of equipment.

118. The specialised nature of these assets (i.e., they cannot readily be put to alternative use outside the industry in question), imply that such investment is largely sunk. Furthermore, resource consents rarely take less than one year to obtain. All told, this suggests it is unlikely that a hazardous waste operator could readily switch into providing treatment services for hazardous wastes that do not currently comprise part of its service portfolio.

119. In respect of intractable wastes, there are features that suggest that an even narrower market definition may be appropriate. Table 4 in the industry background provided examples of different hazardous wastes exported from New Zealand for overseas disposal. In *Veolia / Cleanaway*,[36] the EC considered that the incineration of hazardous industrial and commercial waste by means of a high temperature incinerator "is very likely to represent a separate product market as there is a number of hazardous waste streams (in particular hazardous waste streams produced by pharmaceutical and chemical companies) for which cement and lime kilns or other thermal treatment methods are not viable substitutes."

120. On the face of it, the provision of disposal services for various intractable wastes seem similar – the waste is collected, packed and stored, then shipped overseas to a treatment/disposal operator. However, as with hazardous waste that is locally treated, it is necessary to select an operator who has the capability of handling the specific type of hazardous waste being exported.[37] In order to provide a service for an intractable waste not currently part of its service portfolio, a hazardous waste operator would need to secure a new disposal contract, and export permits from MED. Industry participants indicated that the entire process could reasonably be expected to take longer than one year.

121. The Commission is therefore of the view that there is limited supply-side substitutability between each of the services provided for waste solvent, HTI intractables, miscellaneous chemical waste, and hydrocarbons, and between each of these services and the wider range of hazardous waste services.

122. The Commission has considered the question as to whether there are economies of scope between the different treatment/disposal processes, such that it is more efficient for firms to provide two or more services than provide only one service. Such economies might arise from the fact that a specialised resource, such as a chemist, could be utilized more fully, or because certain management services or overheads do not increase in proportion to the scale of the overall operation.

123. Whilst some hazardous waste operators, such as TTS and Medi-Chem, operate complementary services, a number of other treatment operators are more specialised and their core business consists of providing services for one type

[36] M.4318, *Veolia ES Holdings plc and Cleanaway Holdings Limited*, 21 September 2006, para 25.
[37] A regularly updated report published by the Secretariat of the Basel Convention, *Table 9: Disposals Which did not Proceed as Intended 2004*, provides examples of situations when intractable waste was returned to its origin, as the receiving disposal facility could not process that type of hazardous waste and therefore refused to accept it.

of hazardous waste.[38] Whilst it might be favourable for treatment operators to provide a range of services, the Commission is of the view there is no evidence to suggest that economies of scope are of sufficient significance to merit the aggregation of separate processes into broader markets.

124. The Commission has explored whether the demand for a comprehensive hazardous waste service forces treatment operators to diversify into offering more than one treatment service.

125. Treatment operators are often prepared to accept all hazardous waste types and offer a complete service for their customers, despite the fact that they cannot treat all types of hazardous waste. Treatment operators then sub-contract some waste treatment services to other treatment operators. For example, Chemwaste accepts solvents and intractables from its customers, but then sends these to Medi-Chem.

126. This suggests that the ability to sub-contract services to other operators relieves the hazardous waste treatment operator of an obligation to be sufficiently diversified, and to provide a complete service for the entire range of hazardous wastes produced by a generator. Hence, this feature of demand may not necessarily lead to firms having to provide a range of hazardous waste treatment services.

Conclusion on Product Markets

127. The types of hazardous waste for which overlap occurs in respect of this Decision, and Decision 616, are waste solvent, HTI intractables, miscellaneous chemical waste, and hydrocarbons.

128. On the demand-side, hazardous waste generators are largely conscious of their obligations under the RMA, and do not consider the range of hazardous waste treatment/disposal services to be substitutable. On the supply-side, providing treatment/disposal services for each of these types of hazardous waste requires specialised infrastructure, plant, and equipment that perform specific physical and chemical processes, as well as consents and certification particular to that infrastructure, equipment and process.

129. Although some players offer a range of diversified services, the Commission is of the view that economies of scope and the demand for a comprehensive hazardous waste service are not sufficiently significant to warrant aggregating these various treatment services into a wider hazardous waste market.

130. The Commission is therefore of the view that there is limited substitutability on either the supply- or demand-side between the treatment/disposal services for waste solvent, HTI intractables, miscellaneous chemical waste, and hydrocarbons; and between these services and those for other types of hazardous waste.

131. Accordingly, the Commission considers that each of waste solvent, HTI intractables, miscellaneous chemical waste, and hydrocarbons comprises a discrete market.

132. The Commission further considers the relevant solvent markets, for TTS's proposed acquisition of Medi-Chem's solvent business, in Decision 616.

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[38] For example,
[ ].

133. The relevant product markets in respect of this Application - TTS's proposed acquisition of Medi-Chem's chemical smalls business - are:

- the provision of intractable waste disposal services by means of high temperature incineration (*the HTI intractables market*);
- the provision of miscellaneous chemical waste treatment/disposal services (*the miscellaneous chemical waste market*); and
- the provision of waste hydrocarbon treatment/disposal services (*the hydrocarbons market*).

Geographic Dimension

134. The Commission defines the geographical extent of a market to include all of the relevant, spatially dispersed, sources of supply to which buyers can turn should the prices of local sources of supply be raised. For each good or service combination, the overlapping geographic areas in which the parties operate are identified. These form initial markets to which a SSNIP is applied. Additional geographic regions are added until the smallest area is determined within which the hypothetical monopolist could profitably impose a SSNIP.

135. Generally, the higher the value of the product to be purchased, the more likely are buyers to travel and shop around for the best buy, and the wider the geographic extent of the market is likely to be.

136. On the other hand, the geographic extent of the market may be limited where transport costs are high relative to the final value of a product, or where product perishability and other similar practical considerations, such as the timeliness of delivery, limit the distance that a product may be transported.

137. Although buyers and sellers of a particular good or service may interact in markets that are apparently local or regional in extent, those markets may themselves overlap and interrelate so as to form a market covering a larger geographical area. In these situations, the larger market is likely to be the appropriate one for analysing the competitive effects of a business acquisition.

The HTI Intractables Market

138. The export of HTI intractable waste is undertaken by both TTS and Medi-Chem on a national basis. Intractable waste is collected and aggregated regionally,[39] and is then shipped to Auckland where it is packed into shipping containers and stored until it is exported for destruction. A survey of prices charged by hazardous waste treatment operators did not reveal any significant regional pricing difference for the disposal of HTI intractables.

139. Accordingly, the Commission considers that the HTI intractables market is *national* in scope.

The Miscellaneous Chemical Waste Market

140. In its original Clearance Application, TTS submitted that the miscellaneous chemical waste market is a national market. TTS's treatment facilities are located in Auckland and Wellington, and its customers are largely North Island based, although a number are located in the South Island.

[39] This particular function is usually undertaken by specialist hazardous waste collectors.

141. TTS subsequently advised the Commission that miscellaneous chemical waste treated at its Auckland facility is not transported from outside the Upper North Island region. It does not collect or treat miscellaneous chemical waste for hazardous waste generators in the South Island [ ]. Chemwaste also advised the Commission that it does not transport miscellaneous chemical waste between regions – the waste is transported from the generator to the closer of its Auckland, Wellington or Christchurch treatment facilities.

142. Medi-Chem treats miscellaneous chemical waste for Otago University at its Auckland facility. Medi-Chem advised that the cost of transporting hazardous waste between the North and South Island is such that it is only viable for it to ship large volumes of waste.[40] Medi-Chem said it would not accept small volumes of miscellaneous chemical waste from other hazardous waste generators located in the South Island, as it considers it would not be economic to transport that waste to Auckland for treatment.

143. Miscellaneous chemical waste generators canvassed by the Commission agreed that it would not be economic to send their hazardous waste between the North and South Island for treatment. Many of these generators either did not produce, or did not have the ability to stockpile, the volume of hazardous waste that would make it economic to transport further afield for treatment, even in the face of a SSNIP. Furthermore, there are certain types of miscellaneous chemical waste that are incompatible, and so cannot be aggregated and safely transported together.

144. Other than Otago University's hazardous waste, there is very little miscellaneous chemical waste that is transported between the North and South Islands.
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145. It could be argued that the geographic scope of the miscellaneous chemical waste market is limited to the Upper North Island. However, the Commission is of the view that, for this particular fact scenario, adopting a broader, North Island market is unlikely to significantly impact upon its analysis of the competition implications of the proposed acquisition.

146. To this end, the Commission considers that for this fact scenario, the geographic scope of the miscellaneous chemical waste market is *the North Island*.

The Hydrocarbons Market

147. The Applicant submitted the geographic scope of the hydrocarbons market is the Auckland region.

148. The three main treatment operators (TTS, Medi-Chem, and Chemwaste) have hydrocarbon treatment facilities in Auckland. Whilst the majority of the hydrocarbons treated at these facilities are sourced from hazardous waste generators situated within the Auckland region, all three operators also receive

[40] Medi-Chem usually ships [ ].

hydrocarbons from hazardous waste generators located outside Auckland, but within the Upper North Island region.[41]

149. All three treatment operators advised the Commission that the price for hydrocarbon treatment services is comparatively low, and so the relative transport cost makes it prohibitive to provide treatment services at their Auckland plants for hazardous waste generators located outside the Upper North Island region.

150. Many waste generators located in the Upper North Island spoken to by the Commission agreed with the view that it would not be feasible to send their hydrocarbons to treatment facilities located further away, such as Wellington, even in the face of a SSNIP, due to proportionally high transportation costs.[42]

151. The Commission is therefore of the view that for the purpose of considering this Application, the geographic scope of the hydrocarbons market is the *Upper North Island*.

Conclusion on Market Definition

152. The Commission concludes that the relevant markets for the consideration of this Application are:

- the national market for the provision of intractable waste disposal services by means of high temperature incineration (*the HTI intractables market*);
- the North Island market for the provision of miscellaneous chemical waste treatment/disposal services (*the miscellaneous chemical waste market*); and
- the Upper North Island market for the provision of waste hydrocarbon treatment/disposal services (*the hydrocarbons market*).

COUNTERFACTUAL AND FACTUAL

153. In reaching a conclusion about whether an acquisition is likely to lead to a substantial lessening of competition, the Commission makes a comparative judgement considering the likely outcomes between two hypothetical situations, one with the acquisition (the factual) and one without (counterfactual).[43] The difference in competition between these two scenarios is then able to be attributed to the impact of the acquisition.

The Factual

154. In the factual, the combined entity would be the only supplier of hazardous waste services for the HTI intractables market, due to the elimination of the sole existing competitor (Medi-Chem). In the hydrocarbons and miscellaneous chemical waste markets, the already significant market share of TTS would materially increase.

155. Medi-Chem presently treats hydrocarbons and miscellaneous chemical waste at its site at Lorien Place, East Tamaki. As part of the acquisition of the chemical

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[41] For example,
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[42] Some hazardous waste generators are located equidistant from Wellington and Auckland and advised that it is feasible to send their hydrocarbons to either Wellington or Auckland.

[43] *Air New Zealand & Qantas Airways Ltd v Commerce Commission*, (2004) 11, TCLR 347, Hansen J and K M Vautier, Para 42.

smalls business of Medi-Chem, TTS would be assigned at least part of the lease to Lorien Place.[44]

156. TTS has submitted that in the factual it would continue, at least in the short term, to operate Medi-Chem's site at Lorien Place in addition to its current East Tamaki site at Neales Road (and its other sites elsewhere around New Zealand). It is likely that there would be rationalisation of some facilities.

157. To this end, the Commission considers that in the factual TTS would continue to undertake some chemical smalls operations at Lorien Place.

The Counterfactual

158. In a letter of 22 June 2007, Medi-Chem set out its views on the likely counterfactual. Overall, it considered that
[ ].

159. Medi-Chem advised that its business is "marginally profitable" and raised doubts about the ongoing sustainability of its business. However, at no stage has it been argued, either by the Applicant or the Vendor, that Medi-Chem is a failing firm.

160. The Commission's analysis of Medi-Chem's financial statements suggests that it is just starting to reap the benefits of the substantial investment in, and expansion of, the business that has occurred since it was acquired by Tennex Waste in late 2003.
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162. [
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163. [

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164. [

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165. Accordingly, the Commission considers the likely counterfactual to be that Tennex Waste would either continue to operate and develop Medi-Chem's chemical smalls business in preparation for future sale, or it would sell quite shortly to a third party, which would continue to operate the business. In either

[44] [ ].

case, the Commission considers that Medi-Chem's hazardous waste treatment facilities would continue to be operated in competition with TTS.

COMPETITION ANALYSIS

The HTI Intractables Market

Existing Competition

166. Existing competition occurs between those businesses in the market that already supply the product, and those that could readily do so by adjusting their product-mix (near competitors).

167. An examination of concentration in a market can provide a useful indication of the competitive constraints that market participants may place upon each other, providing that there is not significant product differentiation. Moreover, the increase in seller concentration caused by a reduction in the number of competitors in a market by an acquisition is an indicator of the extent to which competition in the market may be lessened.

168. A business acquisition is considered unlikely to substantially lessen competition in a market where, after the proposed acquisition, either of the following situations exist:

- the three-firm concentration ratio (with individual firms' market shares including any interconnected or associated persons) in the relevant market is below 70%, and the combined entity (including any interconnected persons or associated persons) has less than in order of 40% share; or
- the three-firm concentration ratio (with individual firms' market shares including any interconnected or associated persons) in the relevant market is above 70%, and the market share of the combined entity is less than in the order of 20%.

<u>Declining Market</u>

169. The Applicant submitted that the HTI intractables market is a declining market, due to a decrease in the volume of waste perchloroethylene generated and diminishing volumes of historical stocks of obsolete agrichemicals.

170. Perchloroethylene is a chemical mainly used by the drycleaning industry. It accounts for a large proportion of HTI intractables currently awaiting export. Industry participants advised the Commission that in recent years, production volumes of waste perchloroethylene have been decreasing, and are expected to continue to decline, due to:

- a decrease in the demand for drycleaning services;
- the use of modern drycleaning machinery, which is capable of capturing and recycling spent perchloroethylene (therefore reducing waste); and
- a downturn in manufacturing.[45]

[45] For example,
[

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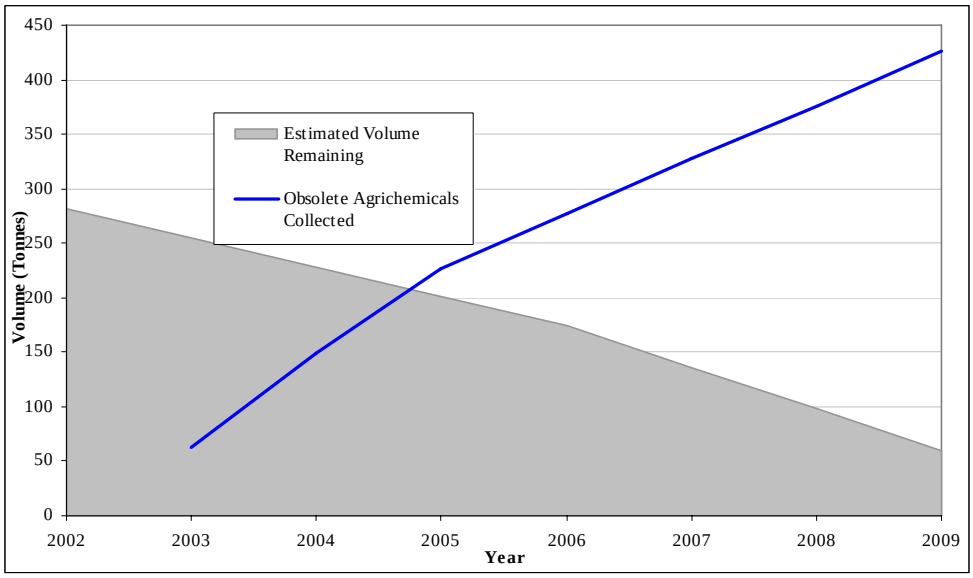
171. In addition, the demand for overseas disposal services for waste perchloroethylene may be affected by the emergence of a new technology, developed by Solvent Rescue, which renders perchloroethylene-contaminated waste safe for disposal to landfill.[46] Industry participants, such as [ ] advised that using local treatment facilities over exporting hazardous waste would cost less,[47] and have environmental benefits.

172. MFE and regional councils have differing views regarding the exact volume of obsolete agrichemicals remaining. Nonetheless all industry participants interviewed by the Commission agreed with the general trends depicted in Chart 1 below, which shows that as legacy stocks of obsolete agrichemicals are collected over time, the estimated volume of obsolete agrichemicals decreases.

[46] Solvent Rescue advised that the technology is [ ].

[47] Solvent Rescue anticipates charging waste generators approximately $[ ]/kg to treat waste perchloroethylene, compared with the $[ ]/kg (depending on waste type) charged by Medi-Chem.

Chart 1: Volume of Obsolete Agrichemicals Stocks in New Zealand 2002-2009[48]



Source: MFE

173. [ ] advised the Commission:

> "the size of the {HTI intractables} market is finite, the more {HTI} intractable waste that is collected, the less there is to collect, until ultimately the business is finished. This is clearly demonstrated by the evolution of the PCB collection and disposal business in New Zealand, which MFE now estimates to be over 90% complete. Very little new {HTI} intractable waste is generated by industry; virtually all {HTI} intractable waste is old legacy stockpiles".

174. Other HTI intractables, which are for the most part waste solvents and other organic compounds too contaminated to treat or dispose of using local methods, are comparatively insignificant in volume. The Commission is of the view that there is no evidence to suggest that these volumes are likely to increase in the future.

175. Taking into consideration the decreasing volumes of legacy stocks of obsolete agrichemicals, as well as the combination of declining volumes of waste perchloroethylene production and the emergence of a new technology to treat this waste locally, the Commission is of the view that the HTI intractables market is a shrinking market.

176. TTS advised the Commission that as the HTI intractables market is shrinking in size it would not viably support more than one hazardous waste operator in either the factual or the counterfactual.

177. The Commission generally adopts a two-year time period for the purpose of assessing the competitive impact of an acquisition, and therefore has examined the scope for competition to occur in the HTI intractables market in the next two years.

178. MFE and regional councils advised the Commission that although the volume of HTI intractables remaining in New Zealand is declining, it is likely that there would continue to be a demand for HTI intractables services for some time yet. It is expected that, at the very least, there would be 60 tonnes

[48] Data for years 2003-2005 is based on actual volumes collected, data for years 2006-2009 is based on estimated volumes.

remaining in New Zealand at the expiry of the MFE Agrichemicals Programme in June 2009.

179. Through the MFE Agrichemicals Programme MFE has committed the majority of the HTI intractables business in New Zealand to one hazardous waste operator (Medi-Chem).[49] However, once this contract expires and the responsibility of eradicating these hazardous wastes falls to regional councils, these volumes would become contestable again.

180. Industry participants advised the Commission that being able to operate relies on accruing sufficient volumes (i.e., filling a twenty-foot shipping container) to make exporting this hazardous waste overseas economically viable.

181. The expiry of the MFE Agrichemicals Programme would result in a change of the demand for HTI intractables services, from one large purchaser (i.e., MFE), to a number of comparatively smaller purchasers (i.e., regional councils). Nevertheless, industry participants advised the Commission that this would not affect a hazardous waste operator's ability to compete in the HTI intractables market.

182. Even in the current setting where most HTI intractables are committed to the MFE Agrichemicals Programme, there are several other hazardous operators, including TTS itself, that have been collecting and aggregating small volumes of HTI intractables for export.

183. The Commission is therefore of the view that it is likely that there would continue to be scope for competition to occur in the HTI intractables market in the next two years.

Present Competition in the Market

184. The HTI intractables market is a highly regulated market, in which there have historically been few operators and a few, large customers.

185. Until recent years, Tredi was the only hazardous waste operator licensed to export HTI intractables from New Zealand. The only two players currently licensed to export HTI intractables are TTS and Medi-Chem. The Commission has gathered data relating to each of TTS's and Medi-Chem's volumes exported, and volumes awaiting export, for in the 2006 financial year. This information is presented in Table 5.

Table 5: Estimated Volumes of HTI Intractable Waste in Storage and Exported in 2006

Operator	Estimated Volume of Intractable Waste (Number of Shipping Containers)	
	Exported in 2006FY	Awaiting Export
Medi-Chem	5	[ ]
TTS	0	[ ]

Source: MED, Medi-Chem and TTS.

186. Medi-Chem entered the market through its acquisition of the local assets (the collection, packaging, storage and export services) of Tredi in 2005. TTS has been accepting HTI intractable waste from industrial and commercial customers [ ], but has not yet exported any of this waste for disposal.

[49] In 2006, [ ] % of HTI intractables collected were through the MFE Agrichemicals Contract.

187. Medi-Chem informed the Commission that [ ] % of the HTI intractables it exports are from its key customers – MFE and regional councils. The remainder is sourced from industrial and commercial hazardous waste generators that have one-off disposal requirements.

188. In the past there has been competition between TTS and Medi-Chem when tendering for the MFE Agrichemicals Programme. Following the expiry of the current contract in June 2009, it is likely that regional councils will engage with hazardous waste operators directly.

189. Several regional councils advised that they either do not currently let tenders, or are unlikely to do so in the future, because of the limited number of operators in the market. It is more likely that they would use a negotiation process instead.

Competitive Impact of the Acquisition

190. In the factual, the competitive constraint currently posed by Medi-Chem would be eliminated, and TTS would be the only hazardous waste operator licensed to export HTI intractables for destruction overseas.

191. TTS already has an exclusive Australasian-wide contract with Ekokem for HTI destruction services. However, TTS informed the Commission that as part of the proposed acquisition, it would inherit Medi-Chem's disposal contract with Tredi, and would use Tredi's parent company for overseas HTI destruction services.

192. TTS advised the Commission that it would also inherit the MFE Agrichemicals Contract through its acquisition of Medi-Chem, and continue this contract until its expiry in June 2009.

Conclusion on Existing Competition

193. The proposed acquisition would result in the loss of TTS's only competitor in the HTI intractables market, Medi-Chem. Therefore, there would be no constraint from existing competition in the factual scenario. Other constraints need to exist in order for the Commission to be satisfied that it should give clearance to the proposed acquisition.

194. The Commission considers that the HTI intractables market is a shrinking market. However, it is likely there would continue to be scope for competition to occur in the next two years.

Potential Competition

195. An acquisition is unlikely to result in a substantial lessening of competition in a market if the businesses in that market continue to be subject to real constraints from the threat of market entry. The Commission's focus is on whether businesses would be able to enter the market and thereafter expand should they be given an inducement to do so, and the extent of any barriers they might encounter should they try.

196. In its original Clearance Application, TTS submitted that new entry is unlikely. Entry requires the co-ordination of a number of factors, which all have different time periods attached to them.

Entry Conditions

197. The likely effectiveness of the threat of new entry in preventing a substantial lessening of competition in a market following an acquisition is determined by the nature and effect of the aggregate barriers to entry into that market.

198. Industry participants advised that a new entrant into the HTI intractables market would require:

- storage facilities (land and resource consents);
- technical expertise;
- MED permit to export hazardous waste;
- disposal outlet; and
- transportation.

199. Medi-Chem advised the Commission that HTI intractable waste is commonly stored for some period of time until sufficient volumes are attained to make a shipment economic, and so a new entrant would require a storage facility in an appropriately zoned area.[50] Industry participants advised that appropriately zoned land is readily available, even in Auckland. For example,
[
].

200. A number of consents and certifications are likely to be required in order to establish a storage facility. These are:

- a land use consent (depending on the local authority);
- a trade waste consent (as there would likely be a need to capture all stormwater and run-off from the site, and treat it prior to disposal to trade waste);
- an air discharge consent (depending on the local authority); and
- certification relating to the collection and storage of POPs and agrichemicals.[51]

201. None of the industry participants canvassed by the Commission considered obtaining HSNO certification to be a barrier to entry. It is common industry practice to contract consultants to assist in training staff and developing practices and processes to ensure a new entrant would qualify for the necessary certification.

202. It is likely that land use and tradewaste consents would be required by a new entrant, although this somewhat depends on the local authority. In order to meet consent criteria, a new entrant would likely need to modify its site: the site would need to be fully sealed and bunded; and stormwater and run-off would need to be captured and treated prior to disposal to tradewaste.

203. Access to staff with technical expertise was not considered to be particularly onerous either. A *de novo* entrant could leverage off the knowledge and experience of its disposal partner, much as Medi-Chem does with Tredi, and

[50] As designated by the relevant regional plan.
[51] With particular regard to *HSNO (Storage and Disposal of Persistent Organic Pollutants) Notice 2004*, and *Code of Practice NZS 8409:2004 Management of Agrichemicals*.

TTS did with Ekokem when it made expressions of interest to MFE and several regional councils.

204. MED advised that there are several key requirements that must be fulfilled before it can grant a permit to export HTI intractables:

- the exporter must submit anticipated volumes and type of waste (as permits are issued on this basis);
- the exporter must have secured contracts to cover the entire transit chain, from export to arrival and disposal;
- the application must be approved by the receiving country as well as transiting countries;
- the recipient of the waste will also need an import permit; and
- although MED does not charge for its services, there may be some costs imposed by the receiving or transit countries.[52]

205. TTS advised the Commission that obtaining a disposal contract can be difficult due to the limited number of overseas disposal operators. However, the Commission notes that three hazardous waste firms have secured contracts with three different overseas HTI intractables disposal firms within the last five years.[53]

206. MED coordinates much of the overseas approval process on behalf of the applicant. Further, most firms that export hazardous waste use a logistics company to coordinate transportation, shipping routes, the necessary permits and insurance, and that a firm that wants to export HTI intractables could do the same.[54]

207. MED advised it would have concerns if parties had experienced the level of difficulty in obtaining a permit described by TTS, emphasising that its role is to manage, not prevent, the transboundary movement of hazardous waste. Information provided by MED to the Commission shows that many parties, including TTS, have managed to obtain licences to import and export various types of hazardous waste, including HTI intractables.

208. [ ] is of the view that a new entrant would likely incur some costs in order to enter the HTI intractables market – primarily associated with establishing a storage facility. However, it regards these costs moreover as "commercial disincentives", rather than entry barriers per se, as it is possible to put strategies in place to mitigate some of these costs. For example, a new entrant could

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[52] The Commission notes that typically, these costs are not substantial. For example, MED advised that a transit permit for Australia is approximately AU$400, and an import permit for the UK is approximately £200.

[53] TTS secured a contract with Ekokem; [ ] secured a contract with BCD Technologies (Pty) Limited; and [ ]. Ekokem and BCD Technologies are two of the 42 disposal operators listed in the United Nations Environment Programme report *Inventory of World-wide PCB Destruction Capacity*, December 2004).

[54] The Basel Convention website provides comprehensive information relating to transboundary movements of hazardous waste on a world-wide scale - most unsuccessful shipments of hazardous waste are due to insufficient information/inaccurate paperwork, or the shipment of hazardous waste to an inappropriate treatment/disposal facility. The numbers of successful shipments by far outweigh the number of unsuccessful shipments, suggesting that transboundary movements of hazardous waste, including HTI intractables, are relatively common.

utilize its land and storage facilities for similar business activities, use facilities provided by regional councils, or use a third-party storage facility [ ].[55]

209. Consequently, the Commission considers that entry conditions are not such as to constitute a barrier that would hinder new entry in the factual scenario.

The "LET" Test

210. In order for market entry to be a sufficient constraint, entry of new participants in response to a price increase or other manifestation of market power must be:

- Likely in commercial terms;
- sufficient in Extent to cause market participants to react in a significant manner; and
- Timely, i.e., feasible within two years from the point at which market power is first exercised.

211. [ ] advised the Commission that existing hazardous waste operators would have an advantageous position for entering the HTI intractables market – they would be likely to already have the appropriate storage facilities, technical expertise, and presence in the wider hazardous waste industry.

212. [ ] has identified two players as the most likely potential competitors in the HTI intractables market – [ ].

213. [

].

214. The Commission is of the view that it is also likely that [ ]. This is what TTS did when it entered the HTI intractables market.

215. The Commission therefore considers that new entry is *likely,* and to be in the form of an existing hazardous waste treatment/disposal operator.

216. [ ] advised the Commission that although they consider that the barriers to entry are not insurmountable, the decreasing size of the market means that a potential competitor would be most likely to enter if it could secure business with one of the few, large customers in the market.

217. HTI intractable customers interviewed by the Commission expressed a preference for a choice of service providers, and said that they would contract with a new entrant, provided that that new entrant could meet the necessary legislative and service requirements.

218. In addition, because HTI intractables are exported by the container-load, it is likely that a new entrant would be incentivised to secure additional disposal contracts in order to attain sufficient volumes of HTI intractables for export.

219. To this end, the Commission considers that post-acquisition, by securing a contract with a large customer, new entry would be *sufficient in extent* to act as a constraint on the combined entity in the factual scenario.

[55] [ ].

220. In respect of *timeliness*, industry participants agreed that new entry could occur in less than two years. Establishment of a storage facility would likely take 2-12 months, and obtaining a MED permit would likely take 3-6 months. The timeframe for securing a disposal contract depends on the extent of commercial negotiation involved. However, the Commission notes that TTS was able to secure a disposal contract and obtain the necessary permits within two years.

Conclusion on Potential Competition

221. The Commission is of the view that barriers to entry into the HTI intractables market are not such as to deter new entry, which is most likely to be in the form of an existing hazardous waste treatment operator. Such entry is likely to be by winning a contract with one of the few large customers in this market, which would divert a sizeable revenue stream away from the combined entity. Furthermore, a new entrant is likely to be incentivised to secure additional disposal contracts in order to obtain sufficient volumes of hazardous waste for export. The Commission considers that new entry is feasible within two years.

222. The Commission therefore concludes that post-acquisition, new entry is likely, and likely to be timely and sufficient in extent to act as a constraint on the combined entity in the national market for the provision of intractable waste disposal services by means of high temperature incineration.

Countervailing Power

223. In some circumstances the potential for the combined entity to exercise market power may be sufficiently constrained by a buyer or supplier to eliminate concerns that an acquisition may lead to a substantial lessening of competition.

224. The combined entity may be constrained if purchasers were able to exert a substantial influence on the price, quality or terms of supply of the good or service. A purchaser would be able credibly to exert such countervailing power if it were large in relation to suppliers, well informed about alternative sources of supply, readily able to switch from one supplier to another, and able to foster new supply (including self-supply).

225. TTS advised the Commission that it intends to continue Medi-Chem's existing relationships with MFE and the regional councils in the factual. MFE has held discussions with Medi-Chem regarding reassignment of the MFE Agrichemicals Programme contract.

226. [

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227. The current MFE contract clearly specifies pricing and service considerations. It also provides MFE with the ability to terminate the agreement in the event of breach of contractual obligations by the service provider.[56]
[

].

[56] For example, the types of chemicals included and excluded under the MFE Agrichemicals Programme; prices for the transportation and disposal of HTI intractables, and a price adjustment formula that takes into account movement in the consumer price index on an annual basis; and the amount of agrichemicals to be collected on an annual basis, with a waiver whereby MFE is not liable for costs associated with agrichemicals collected over and above this amount.

228. [
].

229. Following the expiry of the MFE Agrichemicals Programme in 2009, regional councils will be the main purchasers of HTI intractable disposal services. The Waikato, Canterbury and Wellington regions are estimated to have the largest volumes of obsolete agrichemicals after 2009, and would therefore likely account for the greater proportion of the combined entity's HTI intractable business.[57]

230. [
].

231. [
].

232. [
].

233. [
]. In a letter to the Commission dated 11 July 2007, Tredi stated:

"[
]."

234. [
].

235. Regional councils canvassed by the Commission advised that in the event of an exercise of market power by the combined entity, they would consider contracting with a new entrant, provided that the new entrant had the necessary facilities and expertise.

236. All this suggests that in the event of an exercise of market power, MFE and regional councils could exercise countervailing power by cancelling their service agreements with the combined entity, and facilitating new entry.

237. New entry could either be by a new domestic hazardous waste firm [ ].

Conclusion on Countervailing Power

238. In the face of an exercise of market power by the combined entity in the factual scenario, MFE could reject the combined entity as a service provider and in doing so facilitate entry into the HTI intractables market by a new player. The Commission is of the view that following the expiry of the MFE Agrichemicals Programme in 2009, regional councils are likely to have the same ability as MFE to exercise countervailing power and support entry by a new player.

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[57] Environment Waikato, *Memorandum to Select Committee Hearing Submissions on Waste Minimisation (Solids) Bill; Submission Addendum – Unwanted Agrichemicals, problems with funding and system arrangements*, 26 April 2007.

239. Accordingly, the Commission concludes that post-acquisition, the combined entity would be likely to face constraint from customers in the New Zealand market for the provision of intractable waste disposal services by means of high temperature incineration.

Conclusion on the HTI Intractables Market

240. The proposed acquisition would result in the loss of TTS's only competitor in the HTI intractables market, Medi-Chem. Therefore, there would be no constraint from existing competition in the factual scenario. Other constraints need to exist in order for the Commission to be satisfied that it should give clearance to the proposed acquisition.

241. The Commission considers that the HTI intractables market is a shrinking market. However, it is likely there would continue to be scope for competition to occur in the next two years.

242. The Commission is of the view that entry requirements for the HTI intractables market are not such as to deter new entry in the factual, and that new entry is most likely to occur by an existing hazardous waste treatment operator winning a contract with one of the few, large customers in this market. By winning such a contract, a new entrant would be likely to divert a sizeable revenue stream away from the combined entity. Furthermore, a new entrant is likely to face incentives to secure additional disposal contracts in order to ensure it attains the necessary volumes of hazardous waste for export and to maximise the profitability of its new disposal service. The Commission considers that new entry is feasible within two years.

243. In the face of an exercise of market power by the combined entity in the factual scenario, MFE could reject the combined entity as a service provider, and in doing so facilitate entry in the market by a new operator. The Commission is of the view that following the expiry of the MFE Agrichemicals Programme in 2009, regional councils are likely to have the same ability as MFE to exercise countervailing power by supporting new entry.

244. Accordingly, the Commission considers that the proposed acquisition will not have, nor would be likely to have, the effect of substantially lessening competition in the national market for the provision of intractable waste disposal services by means of high temperature incineration.

The Miscellaneous Chemical Waste Market

245. Miscellaneous chemical waste is a collective term for the small volumes of hazardous waste generated by industry (usually commercial and educational laboratories) that cannot be treated using other automated bulk processes. These waste chemicals have various physical and chemical properties, and are treated by a chemist undertaking any of a number of small-scale chemical reactions in a laboratory.

Existing Competition

246. In its original Clearance Application, TTS submitted that the combined entity would continue to face constraint from existing competitors, such as Chemwaste. In addition, Chemwaste has sufficient excess capacity to treat the volumes of miscellaneous chemical waste presently treated by Medi-Chem.

Present Competition in the Market

247. Because miscellaneous chemical waste is treated by small-scale chemical reactions undertaken by a chemist in a laboratory, its treatment is relatively resource intensive and time consuming in comparison to other, more automated, treatment processes. It is for this reason that when possible, chemical wastes are aggregated with compatible bulk treatment processes, and it is only anomalous chemical wastes that are handled as miscellaneous chemical waste. As a consequence, miscellaneous chemical waste accounts for a relatively small proportion of the total hazardous waste treatment industry.

248. Currently, Medi-Chem and TTS are the two major providers in the North Island miscellaneous chemical waste market. Market shares are based on financial year revenue figures from industry participants for 2006, and are presented in Table 8.

Table 8: Estimated Market Shares for the North Island Miscellaneous Chemical Waste Market in 2006

Treatment Operator	Revenue	Market Share (%)
TTS	$[ ]	[ ]%
Medi-Chem	$[ ]	[ ]%
Combined Entity	*$[ ]*	*[ ]%*
Chemwaste	$[ ]	[ ]%
TOTAL	**$[ ]**	**100%**

Source: Industry Participants

Competitive Impact of the Acquisition

249. In the factual, the second biggest competitor (Medi-Chem) would be eliminated. TTS's market share is already high, and would increase significantly to [ ] % in the factual scenario.

250. Chemwaste's share of the miscellaneous chemical waste market in the North Island is relatively minor. The Commission now turns to consider Chemwaste's ability to expand and exert additional constraint on the combined entity in the factual.

Expansion of Existing Competitors

251. The Applicant submitted that there are few constraints on the ability of existing competitors to expand - the only potential limitations being staff and space.

252. Chemwaste advised the Commission that it has laboratories at each of its sites, [ ]. The only additional resource that Chemwaste would require would be extra chemists.

253. Chemwaste therefore considers that it would face few barriers to expansion, and that it could quickly expand its miscellaneous chemical waste operations to meet an increase in customer demand. This is evidenced by [ ].

254. Consequently, the Commission considers that Chemwaste could easily expand and exert additional constraint on the combined entity in the factual scenario.

Conclusion on Existing Competition

255. In the factual, the number of operators in the miscellaneous chemical waste market will reduce from three to two, leaving Chemwaste as the only competitor to the combined entity. Although Chemwaste is presently a minor operator in the North Island, the Commission considers that Chemwaste could quickly and easily expand and exert additional constraint on the combined entity in the factual.

256. Accordingly, the Commission concludes that post-acquisition, the combined entity is likely to face constraint from its existing competitor, Chemwaste, in the North Island market for the provision of miscellaneous chemical waste treatment/disposal services.

Potential Competition

Entry Conditions

257. Industry participants advised the Commission that a new entrant into the miscellaneous chemical waste market would require:

- access to appropriately zoned land;
- treatment infrastructure (laboratory equipment);
- chemists; and
- consents and certification.

258. Industry participants advised that neither the need to find appropriately zoned land nor source treatment infrastructure were particularly onerous. As discussed in the context of the HTI intractables market, there appears to be sufficient appropriately zoned land available, even within the Auckland region. Laboratory equipment, such as storage facilities, fumehoods, benches and sinks, is neither difficult nor costly to obtain, and second-hand equipment is readily available.

259. The Applicant submitted that chemists are not in scarce supply. It contracts a dedicated chemist on a part-time basis to treat its miscellaneous chemical waste. [ ] advised the Commission that it can be difficult to hire chemists due to the negative perception of handling hazardous waste. However, it does not consider sourcing chemists to be impossible.

260. A number of consents and certifications are likely to be required in order to establish a facility that treats miscellaneous chemical waste. These are:

- a land use consent (depending on the local authority);
- a trade waste consent;
- an air discharge consent; and
- HSNO certification.

261. As with the HTI intractables market, none of the industry participants canvassed by the Commission considered obtaining HSNO certification or resource consents to be a barrier to entry. HSNO consultants are readily available to provide advice and assist in obtaining the necessary certification. Land use and tradewaste consents would require basic site modification to contain and prevent discharge of accidental spills to the environment. Although it might be likely than an air discharge consent is required, industry

participants advised that the relatively small quantities of hazardous substances handled in this type of operation mean obtaining a consent would be a relatively straightforward process.

262. Based on the evidence before it, the Commission considers that entry conditions are not so onerous that they would hinder entry by a potential competitor.

The "LET" Test

263. In the South Island, several existing hazardous waste operators expanded into providing basic services for the treatment of miscellaneous chemical waste (neutralisation and dilution) with little additional investment, e.g., Solvent Refiners and JBL Environmental. However, in order to provide treatment services for miscellaneous chemical waste of a more complex nature, a new entrant would need to meet the requirements set out above. Most hazardous waste treatment operators spoken to by the Commission advised that they could enter the miscellaneous chemical waste market by using existing staff and infrastructure.[58]

264. The Commission therefore considers that, in the event of an exercise of market power in the factual, new entry is *likely*, and would probably take the form of an existing hazardous waste treatment/disposal operator expanding its service portfolio.

265. [ ] stated that they would be most likely to enter if they could secure business with one of the larger hazardous waste generators. The Commission notes that Medi-Chem was able to enter the South Island market in this way, by securing business with Otago University, [ ].

266. The Commission is of the view that by securing the business of a large hazardous waste generator, it would be feasible for a new entrant to win a sizeable revenue stream from the combined entity. Furthermore, once established within the market, a new entrant could readily expand without incurring significant additional capital costs. The Commission considers that post-acquisition, new entry would be *sufficient in extent* to act as a constraint on existing market players in the event of an exercise of market power.

267. Industry participants advised the Commission that obtaining the necessary resource consents would take the greatest amount of time. However, as noted above, because of the relatively small volumes of hazardous substances handled by this type of operation, it is unlikely that this would be subject to the same degree of scrutiny, and therefore would be as lengthy a process, as other hazardous waste operations.

268. The Commission therefore considers that new entry by an existing hazardous waste operator would be *timely*, and could occur within two years of an exercise of market power by existing market players.

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[58] For example, both [ ] advised that they could provide treatment services for miscellaneous chemical waste at their existing sites by hiring additional staff, setting up appropriately equipped laboratories, and obtaining additional certification and consents.

Conclusion on Potential Competition

269. The Commission is of the view that barriers to entry into miscellaneous chemical waste market are not such as to deter new entry in the factual.

270. The Commission considers that new entry would be most likely to occur by an existing hazardous waste treatment operator. Entry by such a player is likely to be by securing treatment/disposal services for one of the larger customers in this market, which is in turn likely to divert a sizeable revenue stream away from the combined entity. Furthermore, a new entrant is likely to be able to quickly and easily expand to meet increased customer demand without incurring additional costs.

271. The Commission considers that new entry is feasible within two years.

272. The Commission therefore concludes that post-acquisition, new entry is likely, and likely to be timely and sufficient in extent to act as a constraint on the combined entity in the North Island market for the provision of miscellaneous chemical waste treatment/disposal services.

Countervailing Power

273. Both the Applicant and Medi-Chem submitted that most laboratories (where a majority of this waste originates) have the expertise to self-supply, and could do so either by using simple self-disposal (using sinks) or by employing a chemist on a temporary basis to carry out disposal work.

274. Smaller customers, such as [ ], advised the Commission that they would be unlikely to self-supply, as they do not have either the staff with the necessary experience, nor the appropriate facilities, to undertake complex chemical reactions.

275. However, larger customers canvassed by the Commission, such as [ ], said that they send their waste to a treatment operator mainly for the sake of convenience. They already have the expertise and facilities to treat their own miscellaneous chemical waste, and could self-supply in the event of an exercise of market power by the combined entity in the factual.

276. [ ] advised the Commission that it also has the necessary facilities to treat its own miscellaneous chemical waste.
[

]. [ ] advised that it would only need to employ extra staff if it decided to treat its own waste in the future.

277. Several hazardous waste operators interviewed by the Commission advised that large hazardous waste generators could also exercise countervailing power through their ability to facilitate new entry. As previously noted, Medi-Chem was able to enter the South Island market by securing business with Otago University. [ ] advised that it would most likely enter if it could secure the waste stream of a large hazardous waste generator.

Conclusion on Countervailing Power

278. The Commission considers that in the face of an exercise of market power by the combined entity in the factual scenario, large customers could switch, or threaten to switch, to self-supply. In addition, large customers could exercise

countervailing power by facilitating entry into the miscellaneous chemical waste market.

279. Accordingly, the Commission concludes that post-acquisition, the combined entity would be likely to face constraint from these customers in the North Island market for the provision of miscellaneous chemical waste treatment/disposal services.

Conclusion on the Miscellaneous Chemical Waste Market

280. In the factual, the number of operators in the miscellaneous chemical waste market would reduce from three to two, leaving Chemwaste as the only remaining competitor to the combined entity. Although Chemwaste presently has only a minor market share, the Commission considers that it could quickly and easily expand and exert additional constraint on the combined entity in the factual.

281. The Commission is of the view that barriers to entry into miscellaneous chemical waste market are not such as to deter new entry in the factual. New entry is most likely to occur by an existing hazardous waste treatment operator, and such entry is likely to occur through securing treatment/disposal services with one of the larger customers in this market. Furthermore, a new entrant is likely to be able to expand quickly and easily to meet increased customer demand without incurring additional costs. The Commission considers that new entry is feasible within two years.

282. The Commission considers that in the face of an exercise of market power by the existing players in the factual scenario, large customers could switch, or threaten to switch, to self-supply. In addition, large customers could exercise countervailing power by facilitating entry into the miscellaneous chemical waste market.

283. Accordingly, the Commission concludes that the proposed acquisition will not have, nor would be likely to have, the effect of substantially lessening competition in the North Island market for the provision of miscellaneous chemical waste treatment/disposal services.

Hydrocarbons Market

284. Waste hydrocarbons are waste products containing organic compounds. They are usually viscous liquids, and include unwanted paint, ink, resins and glues.

Existing Competition

Present Competition in the Market

285. Market shares are based on the volume of hydrocarbons treated during the 2006 financial year, as presented in Table 9.

Table 9: Estimated Market Shares for the Upper North Island Hydrocarbons Market (2006)

Operator	Actual Volumes Treated in 2006 (%)	Current Maximum Treatment Capacity (%)	Maximum Treatment Capacity in the Factual (%)
TTS	[ ] %	[ ] %	
Medi-Chem	[ ] %	[ ] %	
Combined Entity	*[ ] %*		*[ ] %*

Chemwaste*	[ ] %	[ ] %	[ ] %
GMP Environmental	0 %	[ ] %	[ ] %
TOTAL	**100 %**	**100 %**	**100 %**
CR3	**100 %**	**[ ] %**	**100 %**

*Chemwaste was unable to furnish the Commission with volumes treated at its Auckland facility. The Commission has estimated Chemwaste's market share using data for its other treatment facilities.

Source: Industry Participants

286. Table 9 shows that TTS has a market share of [ ] % in terms of actual volumes treated in 2006, and [ ] % in terms of its current maximum treatment capacity. TTS treats a number of other hazardous wastes in its hydrocarbons treatment facility, which strictly speaking, are not waste hydrocarbons. Examples include
[
]. The Commission notes that these wastes are included in TTS's market share but do not materially affect its analysis of the competition effects of the proposed acquisition.

287. Existing competition occurs not only between those businesses in the market that already supply the product; it also includes those that could readily do so by adjusting their product-mix (near competitors). In this fact scenario, the Commission considers that GMP Environmental is a near competitor and hence 'in' the hydrocarbons market, despite it currently having a market share of zero.[59]

288. [

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Competitive Impact of the Acquisition

289. TTS advised the Commission that in the factual it intends to decommission Medi-Chem's treatment infrastructure, and treat waste for Medi-Chem's customers using its existing facility at Neales Road. As TTS currently has a significant amount of excess capacity, it is likely that its Neales Road facility could easily accommodate Medi-Chem's current treatment volumes.

290. Table 9 above shows that in the factual, pursuant to the acquisition and subsequent decommissioning of Medi-Chem's treatment capacity, market shares would be re-distributed.

291. TTS currently has [ ] % of total capacity in the market; post-acquisition, the combined entity would have [ ] % market share in the factual. Chemwaste's market share of total capacity would change from [ ] % to [ ] %, and GMP Environmental's market share of total capacity would change from [ ] % to [ ] %. The three-firm concentration in the factual scenario would increase from [ ] % to 100 %.

[59] Conversely, the Commission considers that PEL, another operator which treats drilling mud, would not be a near competitor in the hydrocarbons market because it is not equipped to handle the types of hydrocarbon waste treated by both TTS and Medi-Chem (which have a higher concentration of volatile organic compounds and particulates).

292. GMP Environmental and Chemwaste both advised that they are not presently operating at full capacity, and could easily meet an increased demand for hydrocarbon services using existing infrastructure. Expansion beyond their current capacity would necessitate the instalment of additional infrastructure, which would depend on the available space and the operator's existing resource consents.

293. [ ] was able to add additional infrastructure and expand its operational capacity within one year.

Conclusion on Existing Competition

294. Post-acquisition, the combined entity would likely decommission Medi-Chem's hydrocarbons mixer, and treat waste hydrocarbons for Medi-Chem's customers at TTS's Neales Road facility. Despite the decommissioning of Medi-Chem's treatment capacity, the combined entity would still possess nearly [ ] of total treatment capacity in the market.

295. GMP Environmental and Chemwaste would be the combined entity's remaining competitors in the factual scenario. Both of these firms have some excess capacity, and could meet an increased demand for hydrocarbon services in the factual. Expansion beyond this capacity would require implementation of additional infrastructure, which the Commission considers is likely to occur within one year.

296. Accordingly, the Commission concludes that post-acquisition, the combined entity is likely to continue to face some competition from existing competitors in the upper North Island market for the provision of waste hydrocarbon treatment/disposal services.

Potential Competition

Entry Conditions

297. Industry participants spoken to by the Commission advised that the key requirements for entry into the hydrocarbons market are:

- appropriately zoned land;
- treatment infrastructure; and
- resource consents and HSNO certification.

298. As previously noted, the Commission is of the view that sourcing appropriately zoned land is unlikely to constitute a barrier to entry as land is readily available, even in the Auckland region.

299. The treatment infrastructure for hydrocarbons is relatively basic compared to some other more technical treatment processes, although both [ ] were of the view that it could reasonably be expected to cost in the order of $500,000 to establish.

300. In its discussion on entry requirements into the HTI intractables market and miscellaneous chemical waste market, the Commission noted that industry participants did not consider obtaining HSNO certification or land use and tradewaste consents to be onerous.

301. It is likely that an air discharge consent would be necessary for a new entrant into the hydrocarbons market, although this would depend on the specific requirements of the local authority. Industry participants were uniform in their

view that obtaining an air discharge consent would be most difficult if a new entrant chose to establish a facility in the Auckland region, as Auckland has very high density industrial zones and has therefore historically had a greater number of environmental impact issues.

302. However, Auckland Regional Council advised that obtaining an air discharge consent for hydrocarbon treatment facilities would not be overly difficult for a new entrant, provided that the new entrant takes the appropriate measures to ensure it meets consent criteria. As the hydrocarbons treatment process liberates volatile organic compounds and particulates, a new entrant would need to have an enclosed facility equipped with an extraction unit and discharge monitoring.

303. In the case of Medi-Chem, Auckland Regional Council advised [

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304. On this information, the Commission is of the view that entry conditions are not such as to deter new entry in the factual.

The "LET" Test

305. The most recent entrant into the hydrocarbons market was Medi-Chem, which entered by acquiring a low-cost cement mixer.[60] However, the Commission is of the view that in order to meet legislative requirements (as set out in the 'Industry Background' section of this Decision) a new entrant would need to fulfil all of the entry conditions set out above.

306. Industry participants canvassed by the Commission advised that in the event of an exercise of market power in the factual, new entry is most *likely* to be by an existing hazardous waste operator looking to expand its portfolio of service offerings. These firms would have the advantage of already being established in the wider hazardous waste industry, and so would be able to leverage off existing relationships, staff knowledge and expertise, and their existing site.

307. Although [ ] considered infrastructure costs to be high, it was of the view that new entry could be facilitated by securing business with a large waste generator. Similarly, [ ] advised the Commission that it would only consider entry should it be able to secure a large enough volume of waste on an ongoing basis to justify the time and investment required.

308. In summary, the Commission considers that post-acquisition, new entry would be *sufficient in extent* to act as a constraint on the combined entity in the factual scenario.

309. In respect of *timeliness*, [ ], and considers this land would be ideal for establishing a hydrocarbons treatment facility. However, because this site is a recent acquisition, it does not have any of the site modifications or resource consents that established treatment operators would have. [ ], advised that in this instance, [ ] would effectively be a *de novo* entrant, but expects to be able to obtain all of the necessary resource consents within 18 months.

[60] At the time of this Decision it had not obtained an air discharge consent.

310. The Commission therefore considers that new entry by an existing hazardous waste operator is feasible within two years of an exercise of market power by existing market players.

Conclusion on Potential Competition

311. The Commission is of the view that barriers to entry into the hydrocarbons market are not such as to hinder new entry in the factual.

312. The Commission considers that new entry is most likely to occur by an existing hazardous waste treatment operator looking to expand its portfolio of treatment services. Entry by such a player is likely to be by securing the business of one of the larger customers in this market, and by doing so it is likely that the new entrant would divert a sizeable revenue stream away from the combined entity. In addition, it is likely that a new entrant would face incentives to compete against existing players to secure additional waste streams in order to maximise the profitability of its new treatment infrastructure. The Commission considers that new entry is feasible within a two year time period.

313. The Commission therefore concludes that post-acquisition, new entry is likely, and likely to be timely and sufficient in extent to act as a constraint on the combined entity in the upper North Island market for the provision of waste hydrocarbon treatment/disposal services.

Countervailing Power

314. A number of industry participants interviewed by the Commission, such as [ ], advised that large hazardous waste generators could exercise countervailing power through their ability to facilitate new entry.

315. [

].[61]

316. The Commission notes that although [ ] was already in the hydrocarbons market, it did not have the capacity to treat this waste.
[
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Conclusion on Countervailing Power

317. The Commission considers that large hazardous waste generators could exert constraint on the combined entity in the factual scenario by facilitating entry into the hydrocarbons market by a new player. Accordingly, the Commission concludes that post-acquisition, the combined entity would be likely to face constraint from large customers in the upper North Island market for the provision of waste hydrocarbons treatment/disposal services.

Conclusion on the Hydrocarbons Market

318. Post acquisition, the combined entity would likely decommission Medi-Chem's hydrocarbons mixer, and treat waste hydrocarbons for Medi-Chem's customers at TTS's Neales Road facility. The decommissioning of Medi-Chem's treatment infrastructure means that the combined entity would possess nearly [ ] of total treatment capacity in the factual.

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[61] [ ].

319. Post-acquisition, GMP Environmental and Chemwaste would be the combined entity's only remaining competitors. Both of these firms have some excess capacity, and could meet an increased demand for hydrocarbon services in the factual. Expansion beyond this capacity would require the building of additional infrastructure, which the Commission considers is likely to occur within one year.

320. The Commission is of the view that barriers to entry into the hydrocarbons market are not such as to hinder new entry in the factual. New entry is most likely to occur by an existing hazardous waste treatment operator looking to expand its portfolio of treatment services, and entry by such a player is likely to be by securing treatment/disposal services with one of the larger customers in this market.

321. The Commission considers that large hazardous waste generators could exert constraint on the combined entity in the factual scenario by facilitating entry into the hydrocarbons market by a new player.

322. Accordingly, the Commission concludes that the proposed acquisition will not have, nor would be likely to have, the effect of substantially lessening competition in the upper North Island market for the provision of waste hydrocarbon treatment/disposal services.

OVERALL CONCLUSION

323. The Commission has considered the probable nature and extent of competition that would exist, subsequent to the proposed acquisition, in:

- the upper North Island market for the provision of waste hydrocarbon treatment/disposal services (*the hydrocarbons market*);
- the North Island market for the provision of miscellaneous chemical waste treatment/disposal services (*the miscellaneous chemical waste market*); and
- the national market for the provision of intractable waste disposal services by means of high temperature incineration (*the HTI intractables market*).

324. The Commission considers that the likely counterfactual would be that Medi-Chem's chemical smalls business would continue to be operated in competition with TTS, whether under existing or new ownership.

325. Post-acquisition, the combined entity would not face constraint from existing competition in the HTI intractables market. The Commission considers that although this market is a shrinking market, it is likely there would continue to be scope for competition to occur in the next two years. Moreover, in the factual, the combined entity would be likely to continue to face constraint from potential competition and the countervailing power of the few, large customers in this market that have the ability to facilitate entry by a new player.

326. The Commission considers that the combined entity would be likely to continue to face constraint from its existing competitor, Chemwaste, in the miscellaneous chemical waste market. In addition, existing players are likely to continue to face constraint from potential competition and the countervailing power of large customers, which have the ability to facilitate new entry and the ability to self-supply.

327. In respect of the hydrocarbons market, the Commission considers that the combined entity would continue to face some extent of competition from GMP Environmental and Chemwaste. In addition, existing market participants are likely to continue to face constraint from potential competition and the countervailing power of large customers, which have the ability to facilitate new entry.

328. Accordingly, the Commission is satisfied that the proposed acquisition will not have, nor would be likely to have, the effect of substantially lessening competition in any market.

DETERMINATION ON NOTICE OF CLEARANCE

329. Pursuant to section 66(3)(a) of the Commerce Act 1986, the Commission determines to give clearance for the proposed acquisition by Transpacific Technical Services (NZ) Limited, or a subsidiary of Transpacific Technical Services (NZ) Limited, of the assets and businesses of Medi-Chem Waste Services Limited that relate to the collection, treatment and disposal of hydrocarbon, miscellaneous chemical and intractable wastes (the chemical smalls business).

Dated this 15th day of August 2007

Paula Rebstock
Chair
Commerce Commission

APPENDIX ONE: RELEVANT PARTIES

Key Parties

Transpacific Technical Services Limited (TTS)	Acquirer
Medismart Limited (Medismart)	TTS's sister company
ERS New Zealand Limited (ERS)	TTS's parent company
Transpacific Industrial Services (NZ) Limited (TIS)	TTS's sister company
Medi-Chem Waste Services Limited (Medi-Chem)	Vendor
International Waste Limited (IWL)	Medi-Chem's sister company
Tennex Waste Limited (Tennex Waste)	Medi-Chem's parent company

Other Parties

Hazardous Waste Operators

Julians Electrical and Energy Conservation Limited	Collector
R & S MacGregor Limited (R & S MacGregor)	Collector
JBL Environmental Limited (JBL Environmental)	Collector
Chemwaste Industries Limited (Chemwaste)	Treatment Operator
Solvent Rescue Limited (Solvent Rescue)	Treatment Operator
Solvent Recovery Limited (Solvent Recovery)	Treatment Operator
BJ Dakins & Co. Limited (BJ Dakins)	Treatment Operator
PEL Waste Services Limited (PEL)	Treatment Operator
GMP Environmental Limited (GMP Environmental)	Treatment Operator
Salters Cartage	Treatment Operator
Waste Petroleum Combustion Limited	Treatment Operator
Watercare Services Limited	Disposal Operator
Tredi New Zealand Limited (Tredi)	Disposal Operator
Tredi SA	Tredi's parent company
[ ]	[ ]
Reidpaints	Paint Recycler
Mainfreight, trading as Chemcouriers (Chemcouriers)	Transporter
RRR	Paint Recycler
Ekokem Ab Oy (Ekokem)	Disposal Operator

Government

Environment Waikato	Local Government
Environment Southland	Local Government
Auckland Regional Council	Local Government
Hutt City Council	Local Government
Manukau City Council	Local Government
Hawkes Bay Regional Council	Local Government
Northland Regional Council	Local Government
New Plymouth District Council	Local Government
Environment Canterbury (ECan)	Local Government
Ministry for the Environment (MFE)	Central Government
Ministry of Economic Development (MED)	Central Government

Customers
Victoria University of Wellington (Victoria University)
University of Otago (Otago University)
University of Waikato (Waikato University)
[ ]
[ ]
Taranaki Sawmills Limited (Taranaki Sawmill)
R J Hill Laboratories Limited (R J Hill)
Resene
Norske Skog
Taranaki Medlab
Industrial Research Limited
G L Bowron & Co. Limited (G L Bowron)

Other
[ ]
Envirocom NZ Limited
Dr Peter Nelson
Brockett & Associates Limited
Asset Disposal Limited